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To be continued Quarterly

Edited by HAROLD COX

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The Edinburgh Review

JANUARY, 1919 No. 467

PROFIT SHARING IN AGRICULTURE

Small Holdings and Allotments in Oxfordshire. By ARTHUR W. ASHBY. Oxford: Clarendon Press.

NO class of the community has gained more by the war than the agricultural labourers. For them it has wrought a revolution which could only have been effected in a generation in times of peace, and then after a struggle that might have gone far to wreck the whole structure of English farming. Before the war agricultural labour formed the great residual occupation, paid at rates that approached the bare level of subsistence, even if they did not fall below the limit which an outside observer would calculate as necessary for the healthy maintenance of a family. It supplied all other occupations with their unskilled recruits, and it gained nothing in exchange, for when men uprooted themselves they left the land entirely. Men did not migrate from the low wage counties like Dorset or Norfolk to better-paid Yorkshire; if they did not go into the towns they emigrated. So strong was local custom that widely different wage rates prevailed within the narrow limits of England, though they were always substantially lower than those paid in the neighbouring organized industries. Moreover, the conditions were bad; hours were long, holidays non-existent, and housing so defective that rural cottages often only escaped the condemnation of the sanitary inspector because he saw no prospect of anything else being substituted.

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A vicious circle had been created : to meet the low wage rates cottages were either included in terms of employment or let at formal rents which bore no relation to modern costs of construction. Though many landlords did continue to build, the process could not be general because they received no adequate return either directly from rents or indirectly in the improved letting value of the farms.

It is true that wages had been rising steadily from 1900 onwards, and that many farmers were so conscious of the diminishing supply of labour that they were improving the position of their men by various indirect means ; but so strong was the general feeling among the employers against any disturbance of the accepted wage for the district, so isolated and unorganized were the men, that the danger was patent of driving men entirely off the land before the farmers, as a body, had realized the need for paying out more money. The farmer could always reduce his labour bill by laying down more land to grass ; stock paid well enough and involved small risks compared with the labour and anxieties that attended arable farming. Moreover, grass was acceptable to the landlords, who as a class were still entirely possessed by the idea of the safety of grass farming, which their experience of the 'eighties and 'nineties of the last century had established. A minimum wage for agricultural labourers was being talked about, but even in the summer of 1915 the labourers' representatives did not ask the Milner Committee for more than a guarantee of a pound a week. When nearly two years later the Government did embark upon a programme of agricultural expansion, a minimum wage became an inevitable part of the Corn Production Act, for a measure which gave some security to the farmer that he would not lose by tilling the land had necessarily to recognize a similar claim from the labourer. The Act prescribed that the Wages Board which determines the minimum rates of wage for each district on the recommendations of the District Committee should in no case fix a minimum below 25s. In practice 30s. a week is the lowest rate that has been fixed. Roughly speaking, the minimum is now double the pre-war standard rate, and however much the wage may be for the moment discounted by the cost of living, the agricultural labourer has obtained an organization for fixing wages on which he is represented equally with the

employers, and which in turn has brought about an organization into unions and a consciousness of power. The Wages Committees can only prescribe the minimal rates for specified hours and the values that are to be attached to allowances; but there are many other questions which the unions, with strikes as their argument, are insisting on settling with the masters, as was seen during the last harvest. By the action of the Wages Board and the unions together it is clear that henceforward the remuneration of agricultural labour will be determined by external bodies and by collective bargaining rather than by custom backed by the social pressure exercised by farmers on one another to keep down labourers' wages. This state of things, coupled with the existence of legal powers to enforce certain rates, implies the establishment of some criterion for determining what wages 'ought' to be, and what they must be, as the very condition under which the employer is allowed to follow his business.

Is such an external criterion possible in any industry, especially in one so fluctuating, so subject to local variations, as farming? The Wages Board are instructed by the Corn Production Act to have regard to the cost of living in fixing their minimal rates, but the more that test is pursued the more intangible and valueless does it become as a basis of action. In Mr. Ashby's book on 'Small Holdings and Allotments in 'Oxfordshire' we may read that a few years ago the then clerk of the Oxford Union calculated that the standard rate of wages in the district was below the amount which it cost the workhouse, with all its advantages of wholesale buying, to feed a man and woman with four children. The best that can be done will be to ensure that if the costs of living do rise by a measurable amount a corresponding sum shall be added to the wages. But this takes no account of other variations in the household economy, nor of the changing standard of living which a self-respecting man considers necessary.

Already both employers and men are appealing to another criterion—the returns that farming can produce. Masters talk about the wages that the industry will bear; the men are thinking of a greater share in the profits. But farming is not a standardized industry like cotton spinning; men will not accept a particular employer's contention that he cannot

make farming pay at a certain wage; nor are masters likely to agree on the proportion of the receipts that is due to them. Yet at bottom there is a rate of wages which the industry taken as a whole will bear, employers being what they are on the average, and if that rate is exceeded capital will drop out of the industry and employment within it will shrink. In the absence of any scientific method of determining the ratio wages should bear to profits, we are driven back on the old give and take method, with the organized men pressing for more and the equally united farmers resisting all demands

Yet though trade unions are now established in agriculture and must be reckoned with henceforward, it is not an industry suited to regulation by trade union methods. Strikes constitute too dangerous a weapon. A very few weeks', even days', strike will ruin a harvest and with it the farmer; a stockyard cannot be closed down like a mill: cattle will be injured or killed if their milking or feeding is interrupted. Moreover, 'sabotage' is both easy and safe. In any well chosen dispute the farmer must yield; the remedy he can use will be to get out of the business. Apart from disputes, the regulation of the industry is difficult; a stockman or a shepherd must work not by hours but by the sun and the needs of his animals, and even as regards the other labourers work has to be related to the weather. Moreover, the farmer is dependent on the goodwill of his men because he cannot in many cases define a standard of performance. Granted that disputes can be settled by a proper arbitration council, such as it may be hoped the Agricultural Wages Board will become, by standing agreements between masters and men, yet the element of willing work and intelligent interest upon which skilled farming is dependent cannot be secured by any machinery, and indeed tends to die out in a system which concentrates so much attention upon rates of wages and defined times and duties.

The result of pure trade union methods may be seen in Australia, where trade union control has reached a perfection of organization which shows clearly its ultimate strength and inherent weakness. In Australia agriculture cannot become a protected industry, able to raise its prices to any level the cost of labour may impose upon it, because the produce has to be sold in other countries under competition in the world market. A point is soon reached when the returns are inade-

quate to meet the charges and restrictions imposed upon labour. The result has been the destruction of the capitalist farming, which engages men as labourers, and its replacement by single-handed holdings, on which the man is free from trade union restrictions and can work as long and as hard as he pleases. Men who formerly ran big dairy herds have found it necessary to let off their cows in bunches of twenty or so with the requisite land, making businesses which can be handled by a single family. As payment the owners take half the milk and buy the other half, handling the whole in the butter factory, which they retain under their own management. Wheat growing, even grape production for wine, may be found conducted on the same share principle. Such a method preserves some of the advantages of business on a large scale, while ensuring the hard work and personal care irrespective of fixed hours which prevail when a man is his own master. Thus small holdings, single man businesses of some sort or other, are likely to grow as the trade union movement strengthens in agriculture and brings the rural labourers into line with labour in other industries. This result will be less due to the question of wages than to the restrictions on hours and the formal definition of men's duties, especially when the trade union comes to be administered by men who are thinking in terms of the factory and workshop, or who, as a matter of policy, deliberately intend to make the employer's position impossible and drive him out of the business.

Behind that policy is often found the supposition that agriculture so differs from other industries that it derives no benefit from large scale production and is even more efficient on the small single-handed scale. Nobody supposes that cotton spinning can be conducted except on factory lines ; no trade union aims at getting back to hand-loom weaving ; yet the necessity of organized large scale working in order to secure production is often denied as regards farming. Small holdings are advocated not only for their social value in enabling a determined man to make a start on a minimum of capital, and as satisfying the need of so many men for an independent existence in which they sacrifice a certain amount of labour in order to be free of any master, but as directly increasing the productivity of the soil. This opinion rests, however, upon a misapprehension.

The productivity of the soil depends upon the style of the cultivation followed. A small holder must produce intensively in order to live. A large holding may also be worked on the same intensive system as a small one, though it will still yield a living when worked on less strenuous methods. Intensive production, though necessary on a small holding, is not a consequence of the size. When a three hundred acre grass farm is divided between twenty small holders who proceed to dig it and grow potatoes and celery, onions and asparagus, the production, as measured either in food or money, goes up with a leap. But the intensive cultivation which is forced upon the small holders was equally possible to the original occupier. He may have been content to make £1 or 30s. an acre out of the grass instead of £10 an acre out of vegetable crops, because he lacked the capital or the knowledge or the enterprise to embark on the other sort of farming, but the land must have been equally capable of producing the vegetable crops under a single management as under that of several men. There is nothing inherently superior in small holders' methods, such as spade culture, which will ensure production at a profit from unsuitable land. When the land is fitted for intensive culture a large holding by reason of the opening it affords for organization can be rendered more effective, acre for acre, than a number of small holdings.

The fundamental basis common to both large and small holdings is the output the land is capable of. The returns per acre depend upon the style of farming adopted, and whatever the style may be that return ought to be larger with the organization of labour, machinery, and materials that is only possible under large scale management. It is generally admitted that small holdings are not suited to the growth of corn or the raising of cattle. This is a consequence of the fact that the gross return per acre which can be attained on such a system does not leave a margin of profit on which a man working a few acres only can live. Corn growing at pre-war prices yielded a gross return of perhaps £8 10s. per acre; milk production upon grass about half as much; cattle raising less still, whereas vegetable or fruit-growing might produce from £40 upwards. Putting aside the fact that all the land cannot be put to market gardening or fruit growing, even

these latter industries can be more efficiently conducted upon a large scale than upon a small. On the large farm horse labour or mechanical traction can be introduced; spraying is only efficient and cheap when organized on a large scale; grading and marketing become more economical with the bulk to be handled. As a matter of fact, in the very districts that are the strongholds of the small holder, the Biggleswade area in Bedfordshire or the Avon valley round Evesham and Pershore, the intensive cultivator with 50 or 100 acres will be found doing his work better, putting in more knowledge and skill and securing a larger output per acre than his neighbours with 5 or 10 acres, though these latter men may yet be thriving and making a good living. The individual attention that can be given by the small holder is valuable indeed in these specialized industries, but the large employer secures this attention none the less, and indeed often gets more of it because he is more enlightened about the need for it. We are apt to fix our attention on the easy-going farmer with plenty of land, which he neglects because the results of his careless methods are good enough for him, indifferently as they show up against the efforts of a near-by colony of small holders. But the easy-going small holder is equally in evidence, and where he is the second or third generation of such occupiers his is often the most slackly managed land in the parish.

This is not an argument against small holdings; they are a necessary part of the rural economy, and there is at present a need for a far greater number of them; but by themselves they do not solve the agricultural problem nor provide for the prime necessity of greater production from, and better use of, the countryside.

But if small holdings are not to be the general solution of the rural problem, the universal method of satisfying the agricultural labourers' demand for a proper footing, what other alternative is there to a continuous and destructive warfare between masters and men? The trade unions, with the Wages Boards as their fighting ground, must work for ever higher and higher wages and more privileges. Trade union methods sort badly with agricultural employment, and the struggle that will set in may be destructive to production. For a time the State may attempt to regulate matters, fixing

on the one hand wages and on the other prices, rents, and farmers' profits; but we have had quite enough experience during the war to know that such control would soon under normal conditions beggar any industry, materially, morally, and intellectually. Either the masters would go out or the men would be beaten back to the sort of position they endured before the war. Is there no alternative?

The workman claims a fair share in the profits of the industry. At every demand for a rise in wages the master declares it is more than the industry can bear. Even if an agreement can be reached as to what is a fair share the determination of costs provides no way out of the dilemma, for what is to be the standard of performance on the masters' part? The workmen can plead that their payment must not be reduced to the standard attained by inefficient management. On the other hand, the really enterprising master, the born entrepreneur, is not going to see his special powers unrecognized and his returns reduced to the common level. Farming is too local a business and too greatly determined by the peculiarities of soil and situation to be capable of standardization. In the cotton business all know to within a small margin what the cost and output ought to be per frame or loom; no one can set a rate of output or profit per acre or per cow. So general wage fixing by any external authority is beset with difficulties if it is to be the means of giving the worker a fair share in the profits earned.

The alternative—and it is a better one for agriculture than for any other industry—is to give the worker a share in the profits over and above his wages and to make him a partner in the enterprise. The object is twofold—to ensure that what the land produces shall go to those who earn it and yet to prevent the industry being broken by an excessive wage rate. The only source of wages and profits is what the land can be made to produce, and this is not an indefinitely elastic quantity. High wages and reasonable hours, as all captains of industry have shown, pay their way, but they may not do so all at once; and if the standard of remuneration is screwed up too fast, without regard to output, the capitalist may be driven into contracting his business or drawing out of it altogether. Agriculture is particularly sensitive in this direction, for the farmer, if labour is too exacting, has always the resource of

dispensing with men and turning over to a less intensive system, for example, to grass instead of arable.

There is a limit to wages—the productive capacity of the man on the soil—and the best way of persuading the workmen not to attempt to force wages over that limit is to make them partners in the business. The question still remains of trying to find a basis of principle for determining what is the fair share for the employer and men respectively to take out of the profits. It can be found in this way. There are three interests entitled to share—capital, management, and labour. Pay each of them at market rates as nearly as they can be found; then divide any profits remaining according to the payments which have been made to the three interests. Capital, represented by the farmer as a rule, will be paid, say, two per cent. over bank rate to represent the element of risk in the enterprise; management—again the farmer—will be credited with the sort of salary at which a manager of that style of farm could be obtained, on an ordinary large mixed farm something like ten shillings per acre per annum; labour will receive the current rate of wages. These three outgoings would be added together, and the profits remaining would be calculated as a dividend upon this total and distributed *pro rata* at so much in the pound on whatever has been paid on each interest. To take a hypothetical example at the rates of wages and costs prevailing before the war: a rented farm of 1,000 acres may be assumed to have £10,000 of working capital invested in it and to be employing thirty men at an average weekly wage of 18*s*. Thus the total wage bill would be about £1,400. The interest on the capital at 6 per cent. would amount to £600; the farmer as manager might be assigned a salary of £400. Let us suppose that a profit of £1,000 remained after labour, capital, and management had been paid. The participators in this profit would be £600 for capital, £400 for management, and £1,400 for labour—£2,400 in all, on which a profit of £1,000 would permit of a dividend of 8*s*. 4*d*. in the pound. This would give the farmer as capitalist a further £250 and as manager £166 more, while the labourers would receive a dividend raising their average wage from 18*s*. to 25*s*. 6*d*. per week. The farmer's gross receipts would amount to £1,416 on a capital of £10,000, not out of the way considering that he is also manager.

This simple illustration does not of course embrace the whole story. Farming is a fluctuating business, and there must be years of no profits and even of losses to be provided for. A first step must be to build up a reserve fund, and to that end 20 per cent. of the profits should be set aside and accumulated until the fund is equal to one year's normal payments to capital, management, and outgoings, i.e. in the above case to £2,400. This fund should be invested in easily negotiable securities outside the business so that it could be drawn upon in any year in which a call is necessary in order to make the dividend up to 20 per cent. In years in which a loss is incurred, i.e. when the receipts are not sufficient to pay the employer his 6 per cent. on the capital and his salary for management, one-half the loss may be drawn from reserve fund; the other half should fall upon the employer. It is axiomatic that labour's rate of wages cannot be reduced below the standard in order to meet losses; moreover, capital is allowed a high rate of interest in consideration of the risk of occasional losses.

Again, some provision should be made to enable the labourer to become a further participator in the business. His dividend will come to him as a lump sum, e.g. in the example given above he would receive about £20; he should be encouraged to invest this in the business either as an addition, if the business is developing, or in replacement of an equal amount of the farmer's capital. This labourer's capital would earn interest and be entitled to dividend at the same rate as the farmer's capital. Moreover, the amount invested must be repayable in full, either on notice or when the labourer leaves the farm.

One other point of more detail requires some consideration. A farmer makes up his books say at Michaelmas. If he works on an annual valuation a profit and loss account is then made out; if he works on the sounder system of book-keeping his crops and stock are carried forward at cost, and the true profit and loss account cannot be made out until the crops and the fattening stock are all realized, probably not before the early summer. In any case the men must work for at least a year before any payment becomes due to them. It is better therefore to make the start on the working of a previous year, and pay the dividend in part as a weekly addition to wages and the balance in a lump sum at the end of the year.

The results of this method of profit sharing can best be illustrated by taking some actual examples from farms to the accounts of which the writer has had access. In 1915, on a farm of 1,100 acres rented at £523, and employing £8,800 of working capital, twenty-one men were at work and received £1,377 in wages, an average of 25*s.* a week. The net returns after paying rent and labour amounted to £1,992, which went to the farmer capitalist, and of it £528 might be regarded as interest on his capital at 6 per cent. and £500 as his salary as manager. On the profit-sharing plan the surplus, of £964 would be available for division, assuming that the reserve fund had been made up previously. In this surplus, labour would be a sharer to the extent of 1,377 parts, capital of 528 parts, and management of 500 parts, and the dividend would amount to approximately 8*s.* in the pound. Thus the farmer would receive a further £212 as owner of the capital and £200 as manager, making his total remuneration £1,440 on a capital of £8,800, or 16 per cent. in all. The average wage of the men would have been raised from £65 to £91, or 35*s.* instead of 25*s.* a week.

In another case, also in 1915, on a small farm of 189 acres the net returns after paying £165 for rent and £330 for labour (six men at about 21*s.* per week) amounted to £604. The capital sunk in the business was £2,050, which at 6 per cent. would be entitled to £123 of the returns; in addition, £100 would be assigned to the farmer as manager. There would be thus a divisible surplus of £381, allowing of a dividend of 13*s.* 9*d.* in the pound. The farmer would receive a further £85 as owner of the capital and £68 as manager, making his total remuneration £376, or 18½ per cent., while the men's wages would be raised from 21*s.* to a little over 35*s.* per week.

Since the year to which these accounts refer wages have been raised to the level which might have been paid on the profit sharing basis; the gross returns have also increased somewhat, but it will be seen that had not the prices of the farm produce advanced the increase in wages brought about by the minimum wage legislation would have reached by 1918 pretty well the highest point that the industry could fairly stand.

The first and most natural objection to the proposed system of profit sharing is that of the farmer capitalist. Why should

he give up so much to his men ? If he can earn from his farm £1,992 in a year, why should he be content with £1,440 ? Even if it is 16 per cent. on his capital, it is none too much for the risks and anxieties of farming. The plain and final answer to this argument is that in view of the organization of the men's unions he has no chance of retaining so large a share to himself as before. If by yielding voluntarily part of his profit he can secure the willing co-operation of the men, the working of the farm may so improve that his income will be maintained ; otherwise he must make up his mind to a career of warfare with the union, of victories and concessions, of strikes and lock-outs. Let him ask himself as a man of business which is going to cost him the more : the partnership which brings the men into business with him or the strike which extorts much the same wages in the long run but with grudging and bitterness ? Something will be earned by the men's participation in the business, for if ever there was an industry dependent upon the personal efficiency and goodwill of the workmen it is farming. Supervision is far more difficult than when men are gathered together in a shop ; not only skill and industry but conscience tells at every turn on a farm ; a willing man can easily earn more for the farm than his own dividend will amount to. If any farmer thinks that the nature of his business is so personal that he is entitled to a larger share of the profits, if, for example, he is dealer as well as farmer, he can assign to himself a higher salary as manager even if he cannot keep the two businesses distinct. If the system becomes at all general the skilful entrepreneur will receive the reward of his skill, for men will compete to work under him.

The scheme involves exact book-keeping and a revelation of the farmer's income. But book-keeping has to come in any case, even if the income tax authorities do not require it in the future ; the necessities of sound business require it, and the farmer will be fully repaid for the trouble it involves. There is every probability that organizations will grow up to provide it at a minimum of expense, and these organizations without publishing the farmer's actual income would be able to certify to the men that the accounts are such as to enable a given dividend to be declared. The shareholders in a company know but little of what the managing directors are

making out of it ; they are content with the accountant's certificate that their dividends have been properly earned. Difficulties of this kind may bulk large at the outset but will disappear when the system becomes at all widely adopted.

A great opportunity for the adoption of the proposed system lies in the farm colonies, which are immediately called for in order to provide returning service men with a place upon the land. Many people seem to consider that these colonies must consist of groups of small holdings. They forget that only a certain proportion of the men in question are fitted by temperament and experience to become successful small holders, and that land suitable for small holdings is not very easy to get. The greater part of such land is already well farmed and fully occupied, and there is nothing to be gained by turning out a farmer with nineteen labourers in order to constitute twenty small holdings. Speaking generally, the underfarmed land of the country which wants taking in hand and resettling is the mixed farming land of not very high quality. To put small holdings on much of this land would be to court disaster, for success could only be purchased by grinding labour. Yet the same land could be profitably farmed and made greatly more productive on a large scale. Let the State or a Public Utility Company take up land of this character in considerable blocks, put in a competent manager, and instal the settlers—the ex-service men—as partners in the large enterprise, instead of as venturers upon separate small portions for each. If there are forty men settled on a thousand-acre farm, and each gets his share of the whole profit derived from the undertaking, his receipts will be greater than he could draw from 25 acres under his own separate management. The cost of the manager's salary on the large farm will be far more than made up by the economies in labour or in buying and selling which a good manager will effect, and capital required for a thousand-acre farm is less than that needed for forty holdings of 25 acres apiece. The only thing the small holder gains is the independent position and the chance of getting on by extra work and extra skill, but the majority of men are not prepared to buy this chance at the cost and risks involved if they see a reasonable living before them when working under orders. By all means let there be small holdings of graded sizes for the independent spirits

who mean to get on by their own enterprise, being either conscious of their power or prepared to pay in person for the right to call no man master. But the ordinary man, and especially the man with no old-time experience of a small holding, will be better suited by a place on a large farm where he will work under direction, but with an interest in the business and a chance of improving his position.

It is on really big farms of 1,000 acres and upwards that the profit sharing system finds its best application; management and organization become more effective in producing profits and form a smaller proportional charge upon the receipts, leaving more to go to the workers in dividends. Managing 200 or 300 acres of ordinary farming land is not a man's job; 1,000 acres is easily within the compass of a skilled farmer, especially if the workmen are themselves keen and feel an interest in the place.

An experiment on the basis outlined above has been initiated by the Board of Agriculture on one of their colonies for ex-service men at Patrington, near Hull. The estate consists of 2,300 acres of good land for corn growing and bullock feeding, but unsuited to *petite culture* from the heaviness of the soil and the late springs prevailing in that district. Other employers have embarked upon similar schemes; in one case the capitalist farmer divides the profits equally between himself and the men after 10 per cent. has first been paid upon the capital, this being taken as the remuneration for both the capital and management. But as far as the writer is aware no other attempt has been made to arrive at a 'fair' or scientific apportionment of the profits between labour and capital. The plan above proposed is founded on the principle of first paying each interest its market rate for the service rendered and then dividing the profits in the proportion of that payment or service. If a number of men associated themselves for such an undertaking they would have to hire both capital and management; management has clearly as much right to participate in profits as labour, and the capital is entitled to its share in so much as it alone runs the risk of loss if the enterprise proves a failure.

It is often urged that small holders can obtain all the advantages of large scale farming by co-operation; that they can buy and sell collectively and that on a colony their holdings

can be so arranged as to admit of cultivation by horses or machinery owned in common or hired from a common centre. It is also urged that for many operations the occupiers can pool their labour, and if the group of holdings is large enough a technical adviser can be put in charge in order to organize joint action, and by his counsel ensure that every man grows the crops or raises the stock that will be most profitable, having in view the necessity of their collection and sale in bulk.

Undoubtedly much could be done in this direction, and no community of small holders can obtain proper returns for its labours without some organization of the kind. It would be a great gain if the spirit of co-operation could be spread among the existing small holders, and it is to be hoped that if a large increase in the number of small holdings follows demobilization and the settlement of ex-service men on the land it will be accompanied by the development of co-operation among the new cultivators. But co-operative farming, as distinct from co-operative buying and selling, is really only adapted to those forms of production in which individual manual operations constitute the major part of the work of the holding. It is well applicable for example to dairy work, where the chief operations, feeding and milking, are carried out by hand, while the sole produce, milk, must manifestly be pooled for sale or manufacture into cheese or butter. Even the horse cultivation of the land on each holding set aside for the growth of fodder crops can be organized co-operatively. In fruit growing again manual work preponderates ; the few horse or mechanical power operations—cultivation between the rows and spraying—could readily be hired from a common centre, while the greater and more critical part of the work is left to the individual occupier. But the main items of farming in this country, such as the growth of corn crops, the raising and fattening of cattle and sheep, even potato growing, do not lend themselves to co-operative production. They demand large fields to enable machinery or horses to work with due economy, and in a co-operative group every occupier would be wanting to hire the common stock of horses and implements at the same time for such operations as seeding and harvest. Moreover, in corn growing the big collective operations, ploughing and cultivating, sowing and reaping, are just those that

matter; there is little opening for the further work of the individual on his own plot.

It is just possible to conceive that a group of small holdings could be so laid out as to permit of strips of the staple crops running through each until a large enough area was made up for economical cultivation; but the practical difficulties are great, and if they were overcome the small holder would to that extent have sacrificed his individuality and submitted to a common direction, so that the result would be in no essential feature different from that of the large farm worked on the partnership basis. The ultimate outcome of the partnership method should be that the workers come to own the whole of the capital, when they would appoint the manager as shareholders appoint a directorate, and that ideal is probably easier to realize than the combination of a group of small holders to engage in a common system of farming. For it must be confessed that co-operation is a plant of slow growth among small holders; even as regards buying and selling it exists as yet but to a limited degree because it is not attractive to the individualistic instincts and self-sufficiency which form the very basis of the character of the successful small holder.

The great advantage of the proposed scheme of partnership in farming is that it can be brought into operation at once without any disturbance of the system of management prevailing in this country, and without any immediate preliminary change of heart or habit of mind among the men to whom it is to be applied. It meets the need for increased production, for the use of machinery and labour saving implements, and it is applicable to the second-class soils which constitute the bulk of the land of this country. The crying need of English agriculture is the strenuous cultivation of the great breadth of poor clay land in the midlands, and to a lesser degree in most of the other counties, now carrying indifferent grass or still less remunerative crops, starved, unameliorated and undrained, suffering from years of neglect. This land can be made productive and will support a population, but it requires capital and bold constructive management that will not be repaid in the first year or two. The chalk again, our most extensive soil type after the clay, is only suited to large scale farming. We have a great programme of land settlement before us, but it will be mere cruelty to put men

on 25 acres or so of the clay pastures of Northampton, Leicester and Huntingdon. Only the most unremitting toil of the occupier and of his family can wring a living off such land, where the spade has to do the labour which should be carried out by the steam plough or the tractor. Even a two horse team is inadequate to such land ; the present-day poverty of the small cultivated farms on it is due to the fact that there has never been power enough available to move more than four or five inches of the surface. How are the big drainage schemes, the wholesale liming that is imperative, the liberal expenditure on manures, to be carried through if the land is to be cut up among a multitude of small holders, short of capital and knowledge as they must be, however boldly the State comes forward to their assistance with credit and with instruction ?

Small holdings, and many more of them, there must be, but to give their occupiers a reasonable chance of living they must be on good land and on the lighter warmer soils, and they must be near the main lines of communication. The bulk of the land of England and Wales can only be farmed productively and made to carry its maximum of population by means of large farms. It is to meet the need of that system of agriculture and to secure a due return and a proper position for labour that the partnership method is advocated.

The partnership system gives the labourer an immediate and a growing interest in the business ; taking a long view it may provide the transition stage to a new system of rural society. It satisfies the desire for differentiation between the capacities and working powers of different men, for the big farm will have different grades, from foremen through sub-managers to managers. It is consistent with piece work, yet unlike pure piece work it does not end in sweating and cut rates of pay. It in no way comes in conflict either with the fixation of standard rates of wages by the Wages Board or the organization and direction of labour by the trade unions—except in so far as the trade unions may decide to oppose any system which would leave the capitalist a place in the organization of industry. It promotes the skilled and conscientious work indispensable in agriculture, which differs greatly from minding an automatic machine. It will enable a man to save if he wants to make a start elsewhere, and

as it encourages a man to invest in the business the pressure will be on the master to keep him rather than pay him out. It therefore makes for the independence of the men and for considerate management on the master's side.

Lastly, and this is the root of the matter, partnership affords the only working alternative to a constant struggle between the capitalist farmer and the workers, a struggle which is specially dangerous to the productivity of the business of agriculture, where the duties of the labourer are insusceptible of exact definition and his goodwill is the most valuable of all assets. As a system it may—indeed it is the only system that can—arrest a movement in organized labour which in its Marxian effort to eliminate capital altogether would begin by destroying the only kind of farming that can meet the national need for production on the greater part of the land of the country.

TRANSPORT RECONSTRUCTION

First and Second Reports of the Select Committee on Transport. H. of C. Papers, 130 and 136. 1918.

IN January of last year there was published in this REVIEW by an anonymous but obviously competent writer an article on the future of English railways. I propose in this article to avoid the ground traversed by 'X.' Mr. Winston Churchill has been permitted to announce uncontradicted that the railways will be nationalized. What this means we know not. That the railways cannot be handed back to the companies *sans phrase*; that for some time to come the Government must retain possession and control so complete as to be scarcely distinguishable from ownership—this we knew without Mr. Churchill to tell us. But if the announcement means that the railways of this country are to be nationalized as the railways of Prussia are nationalized, then perhaps the new Parliament may claim a voice in the matter. It may be that the House of Commons will think fit to keep the door open, and not shut out the possibility of handing back a reorganized railway system to a limited number of operating companies on the French system. But the question has not yet reached a stage when it can be profitably discussed.

But, in passing, one or two obvious features of the post-war railway situation may be noticed. That the enormous increase in wages and in cost of material must have swallowed up a large part of the pre-war net income is matter of common knowledge. In wages alone—to say nothing of increased cost of material—the advance is not less than £51,400,000 (33*s.* × 52 weeks × 600,000 employees), and the total net income in 1913 was £52,000,000.* Again it is clear that the result of combination will be that a good deal of the money spent for competitive purposes will be dead capital under a monopoly

* Heavy payments for overtime probably make the total advance considerably above this. The concession of an 8-hours day may mean anything from £10,000,000 to £20,000,000 a year more, according to the method adopted in working out the change.

system. To take a very simple instance, there are hundreds of cases where two or even three companies have built branches and siding connexions to get into the same colliery or works. When all traffic is sent the way in which it can most conveniently be handled, the extra line or lines will be a dead asset that ought, under strict accounting methods, to be written out of the capital account. On the other hand, to make conjunctive groups of line, designed to be disjunctive, implies the expenditure of a good deal of new capital. In addition, new capital must be spent if operating economies are to be obtained. Where economy demands larger operating units—engines, trucks, and so forth—tunnels must be widened, bridges strengthened, hoists and tips and turntables enlarged, new rolling stock built, etc. The railway situation which we have to face will accordingly be (1) earning power greatly enlarged, but operating expenses increased in far greater degree; (2) a considerable demand for the expenditure of new capital at the same moment that a large part of the old capital is shown to have lost such earning power as it ever possessed.

We may at least draw one conclusion: that the situation is so serious as to demand careful and discreet handling, for even nowadays £1,300,000,000 of capital is admitted to be quite a large figure to deal with. Whatever policy may be adopted for the development of other means of transport—whehter canals, light railways, or organized road motor services—the setting up of new competition with the existing railways is to be avoided if at all possible, lest their financial position should become even more serious. We must always, in the interest of the best use of the economic resources of the country as a whole, regard these minor methods of transport not as competitive but as supplementary and complementary agencies. I propose in this article therefore to discuss the proper sphere of these latter agencies of transport from this point of view.

But before leaving the railways a word must be said as to two projects which have been a good deal before the public of late, both of which imply large expenditure of new capital. Both of them are tunnels—and therewith all resemblance stops.

The proposed English Channel Tunnel lies in the direct line of one of the greatest and most valuable streams of traffic

in the world. It has London and the British Isles behind it on the one side, and Paris and the whole Continent of Europe on the other. Before the war, a million passengers and tens of thousands of tons of high-class goods passed over the top of it every year. The physical conditions are, so far as is known—and they have been pretty exhaustively examined—entirely favourable. The alterations on the railways from Dover to enable foreign rolling stock to run through to London would not either be serious or costly. That the tunnel would be an enormous boon to travellers, that it would be a great advantage to English trade, is undeniable. Having regard to the volume of traffic even at the moment, to say nothing of future expansion, and to the high rates that the traffic could afford to pay, it would probably be a financial success. The only objection in pre-war days was the military one, and our experience in the war suggests that the military argument may now be in favour of a tunnel.

Of the proposed tunnel to Ireland it is difficult to speak with the respect due to the respectability of its advocates. So far from lying in the line of a direct stream of traffic, it would connect the North-East corner of Ireland with a remote corner of the South-West of Scotland. If constructed, it would get the passenger traffic and a certain proportion of the merchandize traffic between Glasgow and Belfast, and possibly Dublin. It could expect little more. The main exports from Great Britain to Ireland are coal from South Wales, Lancashire, and Lanarkshire ; merchandize and miscellaneous goods from London, Birmingham, Lancashire, and Yorkshire, and to a less extent from Scotland. Does anybody imagine that coal would take the tunnel route, or that merchandize from London and Birmingham to Dublin and the South of Ireland would wander round by Carlisle and Stranraer and Donaghadee ? The mail service from London to Dublin takes ten hours at present. Via the tunnel it could hardly take less than fourteen. Similar considerations apply to traffic in the reverse direction. The chief export of Ireland is agricultural produce, cattle and butter, bacon and poultry. It comes in the main from the South of Ireland and goes in the main to Wales and the South of England. As for the physical difficulties they are unexplored. But, having regard only to the depth of the sea in the Channel between

Ireland and Scotland, they are quite considerable. The cost of the tunnel would be enormous ; its earnings would be trifling. Before a single English vehicle could run in Ireland it would be necessary to alter the gauge of every mile of railroad throughout Ireland, which implies further the rebuilding of every railway vehicle in the country. The project is utterly preposterous ; and the sooner it is interred as an archæological curiosity along with South Sea Bubbles and schemes for extracting sunbeams from cucumbers the better.

To deal next with the question of canals. There seem to be a good many people in this country—among them no less a person than the Prime Minister—who believe that in other countries, especially France and Germany, canal traffic is almost as important as railway traffic. The facts are quite otherwise. In the first place, the inland water traffic of these countries is very largely not on canals at all, but on great rivers, especially the Rhine, the Elbe, and the Seine, whose natural channels have only needed comparatively small artificial works to render them capable of carrying vessels of large size. And all the inland water traffic, canal borne and river borne, is not more than a fourth or a fifth of the railway traffic.

In Germany the Imperial Government, with the Kaiser personally at its head, has for many years done its utmost to encourage water carriage. The reasons and the methods are too long to give here. And yet in Germany three-quarters of the total traffic is carried on the railways, and one-quarter only on the waterways. Moreover, four-fifths of the waterway traffic is carried on the seven great rivers, the Memel, Vistula, Oder, Elbe, Weser, Rhine, and Danube. In other words, canals proper carry one-fifth of one-quarter, i.e. 5 per cent., of the total traffic of the country. The increase of water traffic has roughly kept pace with the increase of rail traffic ; but the increase has been not upon the artificial canals but upon the natural rivers. In 1875, the seven rivers carried 60 per cent. of the total water traffic ; in 1905, 80 per cent. Of this traffic no less than 43 per cent. was carried on the Rhine alone between Kehl, opposite to Strassburg, and the Dutch frontier ; on the Elbe between Hamburg and the Austrian frontier, 24 per cent. These two lengths of river make a total of 741 miles. The total length of all the waterways of

the country is 7,582 miles. In other words, less than 10 per cent. of the waterways carried 67 per cent. of all the traffic. Two things then are obvious. As we have no waterways in this country comparable with the Rhine and the Elbe, we cannot dream of developing an internal waterway traffic comparable to that of Germany. If in Germany, the country where most has been done to develop internal water traffic, canals carry only 5 per cent. of the traffic carried by railways, the German precedent hardly entitles us to expect that English canals can take a more prominent share in our own transport development.

Now let us turn to France. The total internal water-borne tonnage of the country is something like 34,000,000 tons ; the rail tonnage about 158,000,000 ; and of the water-borne tonnage one-third belongs to the River Seine. In other words, all the canals and all the other rivers put together carry less than one-seventh of the railway traffic. And even this small fraction is obtained by the canals, not as the result of their comparative economic efficiency, but by deliberate interference of the Government in favour of the canals.

The story is too long to be told here. But in outline it is this. Out of every sovereign paid for the carriage of goods on a railway, there goes, very roughly, taking the world average, 10*s*. to remunerate invested capital, 4*s*. to maintain the plant, and 6*s*. to pay for the actual work of conveyance. In the case of canals it is not possible to give similar average figures. But the three costs, for interest, for maintenance, and for conveyance, all exist and have to be paid by somebody. In France the whole of the capital invested in canals and river improvements has been provided by the State, and the interest is part of the general budget. The whole of the maintenance costs, down to the wages of the lock-keepers, are also provided by the State. So the trader sending goods by canal has only to pay the mere conveyance charges, which are certainly not more than half of the total cost. Adding together capital, maintenance, and conveyance charges, the total cost of moving a ton a mile on a canal is shown by the statistics to be more than the total charge for moving a ton a mile on a railway. But as on the railway the trader pays the whole cost, whereas on the waterway the State pays one-half of the cost for him, t is only natural that the traders in regions where canals are

at all possible are in favour of a forward canal policy. And as the traders in the canalized and canalizable regions are organized and vocal, while the taxpayers in the rest of the country are unorganized and silent, it is only natural that the Government yields. Indeed, the French Government actually goes further, and partly to placate the canal interest, and partly to get traffic on to the waterways so as to afford apparent justification for the expenditure of money upon them, it compels railway companies on lines competing with waterways to maintain tariffs at least 20 per cent. higher than the waterway tariff for the same traffic. In other words, the French Government acknowledges, what all history proves, that at equal rates a railway can sweep away the traffic of a rival canal.

There are two countries in the world where canals have been left unaided by the State to face the economic competition of the later built railway—England and the United States. In both countries, leaving out certain exceptional cases which will be dealt with presently, canal traffic has shrunk to a negligible quantity. The bulk of the canals in the United States have nowadays been formally abandoned. Many of them have been abandoned here. A large number have been only kept open by statutory compulsion. Of those that remain not a few may be compared to some of the grass grown Roman roads, whose course the curious antiquarian still follows in Gloucestershire or Sussex. Their course is clearly traceable, but they are not used, for nobody wants to use them ; and the occasional person who desires to do so finds that the works have fallen or are falling into decay because it is worth no one's while to keep them in order. In eighty years, during which private capitalists have found thousands of millions of pounds for railway building, the amount of private capital that has been invested in canal building or even in canal improvement and modernization is absolutely negligible.

And yet there is an almost universal belief that canal carriage is cheaper than rail carriage. A distinguished economist expressed not long ago to the present writer his astonishment that anyone should seriously maintain the contrary belief. But the facts are plain. Where canals and railways have been left free to compete, canals have been beaten out of the field ; even where, as in France or in Germany, the railways fight

with one hand tied behind them, canals scarcely hold their own.

The reason why this is so may be very briefly stated. It will of course be assumed in making the comparison that the canal customer has to meet all the costs, direct and indirect, of the traffic, and that he is not to be allowed, as in France, to shuffle off on to the taxpayer one-half of the total cost. To build a canal does not cost less than to build a railway. A canal can go round sharper curves, but, on the other hand, it can only climb gradients by locks ; and locks are not only expensive but obstructive. They run so-called express boats on French canals. But the express has to stop at every station. Indeed a canal costing the same price per mile as a railway is between two given points much more expensive ; for the railway goes straight and the canal goes round to follow the contours. From London to Oxford is fifty-five miles by road, sixty-three miles by railway, and a hundred miles by the Thames Navigation ; and this percentage difference in mileage is something like normal. But it is said, ' A canal may not ' be cheaper to construct, but at least a horse and a canal boat 'is a less expensive vehicle of conveyance than a locomotive ' and a train of trucks.' True. But a locomotive carries its burden twenty miles in an hour against the two miles of the canal, and the volume of work done by the unit in a given time may be set off against the cost of the unit itself.

Again, the carrying capacity of a canal is much less than that of a railway. A railway can be built with one track, and when that becomes overcrowded a second track can be added at a moderate expense. But to widen a canal means practically rebuilding and the stoppage of all traffic till the work is completed. Once built, a railway works, practically speaking, without interruption, year in year out, day and night. Canal traffic is only with difficulty carried on after dark, and is liable to interruption from want of water in summer and from ice in winter. A serious leak in the bed or banks of the canal—not an infrequent occurrence in mining districts—means that the canal has to be emptied and the traffic stopped.

Again, a railway can go anywhere. A canal is subject to two limitations. It can only reach certain places, and it would be an intolerable nuisance if it attempted to intrude in others. The cost of taking a canal into a hilly country,

and working it if it got there, would be prohibitory. The railway runs its trucks into every colliery and sets them right under the screens, and into every works inside the sheds and alongside the furnaces—points that the canal can only reach by transhipment into wheeled vehicles of some kind.

Take another point where the canal inferiority is equally evident. The railroad carries traffic of all kinds, passengers, mails, parcels, perishables, and high-class commodities in small lots, as well as coal, dung, and iron ore in wholesale quantities. It is only the bulk traffic in low priced goods that the canal can deal with; and these are precisely the goods that can only bear a low rate. Yet from these goods the canal must make enough profit to pay its way. Having, from the passengers and the high-class goods, paid the bulk of its general expenses, the railway can afford to carry the coal and the manure for little more than out-of-pocket expenses of conveyance. In other words, not merely can the railroad afford services to the public that the canal is incapable of affording, but, even for the traffic for which alone the canal can cater, it can afford to offer rates at which the canal cannot live.

That this rough sketch of the economic inferiority of canals is in the main true may be taken as proved not only by the history outlined above, but by the very significant fact that, as far as I am aware, not a single canal advocate—and there are many of them not only in this country but on the Continent and in the United States—has ever attempted either to prove *a priori* the economic superiority or even equality of canals, or to produce a concrete instance in which, where the economic efficiency of canal and railway has been tested alongside on equal terms, the canal has been able to hold its own. If this be true, the conclusion follows that, while we ought to make the best use we can of the canals that we have, it would be contrary to the public interest to embark on any extensive programme of canal development and modernization.

Waterways called by the name of canals are of very various kinds. There is first of all the Manchester Ship Canal, which is in effect the prolongation up to Manchester of the estuary of the Mersey, and is hardly more artificial than the extension of what, two or three generations back, before man came to the aid of nature, were streams so shallow as to be almost,

if not quite, fordable—the estuary of the Tyne to Newcastle and of the Clyde to Glasgow. Of the Manchester Ship Canal there is no reason to speak here further. But a word must be said as to another projected ship canal, that across Scotland from the Forth to the Clyde. On the principle put forward in this article, that no capital should be spent on transport enterprises unless to serve purposes of development and not competition, the proposed Forth and Clyde Canal cannot be justified in the proximate future. Say that it costs £20,000,000, this means £1,000,000 per annum for interest; and unless the gain to the community is equal to this figure the result is a net loss. Leith might gain at the expense of Glasgow, or Glasgow at the expense of Hull, but in either case the community suffers. There would be a further economic loss to the community in the fact that the railways would lose some of the cross-country traffic, which they are able to carry, and their net revenue—which will mean in the future the net revenue of the country—would suffer accordingly. On the naval question I am not competent to speak. But apparently the Navy has not asked for it, and the Navy in the present war has done pretty well without it. When the Navy seriously advocates a Forth-Clyde canal on strategical grounds the proposition can be examined afresh.

Canals proper may be divided into two classes. There are canals such as the Aire and Calder and the Weaver Navigation, of considerable dimensions, running a comparatively short distance through level country into a great estuary, and capable of dealing cheaply with, and actually carrying, a very considerable traffic. Their existence is fully justified economically. They are up to date, and money needful for maintenance and current improvements will not only be well spent, but easily found without State interference. The other class—which contains almost the whole of our English canal mileage—may be taken as typified by the Grand Junction, which anybody can see running for miles parallel to the main line of the North Western between Euston and Rugby. It has on the average a lock every three-quarters of a mile, and is capable of accommodating a barge carrying thirty tons of coal, or twenty tons of less dense material. It would need twenty such barges to take the contents of one North Western coal train as it is, and many more to take those of a North Western train as it

might be. It would need a hundred such barges to take the contents of one normal American coal train.

The point that I desire to make is this. It is universally admitted that a canal of Grand Junction type is practically useless for important through traffic nowadays. If it is to be of any service it must be modernized, which means practically closed and rebuilt, much wider and with entirely new and much larger locks. The cost was estimated ten years ago by the Royal Commission at about £36,000 a mile. It may safely be assumed that it would not be less than £60,000 at post-war prices. Now the facts and considerations put forward above prove conclusively that for such an expenditure there is no justification whatever. With much less than their pre-war supply of rolling stock our railways are to-day carrying fifty per cent. more traffic than five years ago. With a comparatively trifling expense for new communications and relief lines and shunting yards here and there, they could easily carry traffic increased by fifty per cent. again. To spend millions of public money on galvanizing back into life a moribund competitor with railways, which after the war must be run in large measure at least at the cost and charges of the public, would be a preposterous policy. There is, however, one alternative. England is still to a considerable extent a free country. If the enthusiastic advocates of a forward canal policy desire, by investing their own money, to prove the truth of the assertion that modernized canals free from railway control can be made to pay, they should be given every opportunity to do so. The point cannot be put better than in the words of the House of Commons Transport Committee. Discussing the question of reconstructing the canals centering on Birmingham, of which the Grand Junction is one, they say: 'It is clear to your Committee 'that proposals which would involve the expenditure of '£38,000,000 for the improvement of property which is at 'present valued at £6,000,000 would have to be supported 'by most convincing evidence.'

Of course to press the point that any large scheme of canal modernization would be waste of money is not to say that existing canals, or at least many of them, should not be maintained in a condition to continue to render such services as they are capable of. To say that a house is worn out and out

of date and should not be repaired at twice its original cost, is not to say that one should not mend the glass in the windows and replace the broken tiles on the roof Canals of the Grand Junction type can and still do render useful service in distributing coal and building material and manures and bulky farm produce between points not far distant from each other and closely adjacent to the canal banks at each end. If we keep this end in view and regulate our canal policy and our canal budget accordingly—for it may be assumed that the canals, like the railways, having got into the public hands, will not go back *sans phrase*—we shall act wisely. But a Freycinet policy of magnificent expenditure and minuscular returns must be avoided at all hazards.*

Now let us turn from canals to light railways. Some five and twenty years ago there was a strong movement in this country in favour of light railways, and the present writer was among the most active and persistent of their advocates. The result was the Light Railways Act, 1896, and the Light Railways Commission. And the mountain has brought forth a mouse. Quite a large number of Orders authorizing construction have been granted. In most cases the Order has remained a dead letter and nothing has been done to carry it out. The lines actually constructed under the Act may be divided into three classes. The most numerous class consists of what are really urban or suburban tramways, called light railways because the conditions under a Light Railway Order are less burdensome and restrictive in various respects than in Orders under the Tramways Act. Next come a certain number of branches, constructed by the main line companies as light railways instead of under a special Act of Parliament,

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* The following extract from a letter of a friend who speaks with authority upon these matters is relevant:—'The Manchester, Bolton and Bury Canal upon which there are a large number of very fine cotton mills is in first-class condition. . . . With the exception of a few mills on the line of route nothing would induce the cotton people to make use of this canal although there is nothing intervening between their mills and the canal except the towing path. What they like is rapid delivery of small parcels by railway from Liverpool, with the advantage of being able to store these small parcels in the railway goods sheds and get them brought to their mill a few at a time.'

because in this case also the requirements of the Board of Trade both for construction and operation are less onerous than in the case of an ordinary railway. Neither of these classes is a light railway in the sense in which the word is understood on the Continent. There remain a handful of real light railways independently promoted for the development of agricultural districts. Only one appears to have succeeded in paying a moderate dividend, and this under quite exceptional circumstances. The rest have not achieved such a financial success as would be likely to encourage further investment.

Let us take a single example. The Mid Suffolk Railway is a line nineteen miles long, and its capital cost amounts almost exactly to £10,000 a mile. Its total gross earnings were in 1913, £5,817; expenses, £4,872; leaving a net return on capital of something less than one-half per cent. In round figures the earnings are £6 a mile in a week and the expenses £5. Without any special knowledge of the circumstances of the Mid Suffolk Railway we may safely say that this lamentable result is due both to the excessive capital cost and to the unduly low earnings. In France and Belgium it may be assumed that on a line of a similar type the capital cost would be not more than £5,000 a mile at the outside, the earnings would be £10 a week, and the expenses something like £6 a week, which would give a four per cent. return on the capital. In England the Board of Trade, the Light railway Commissioners, the local authorities, and the railway company with which the light railway needs to make connexion, all combine to insist on a standard of construction that would be regarded as ludicrously extravagant outside this country.* Another obstacle that has been absolutely fatal to success is that, whereas in every other country it is recognized that a light railway with sparse traffic can only live by charging much higher rates than a main line with a dense traffic to draw from has any need to charge, in this country light railways have

* Soon after the passing of the Act the present writer as counsel promoted a light railway in one of the most remote and sparsely populated corners of the country. The local authorities combined to demand that a bridge, over or under the railway as the case might be, should be provided not only for every high road but actually for every footpath that crossed the proposed line. Construction has not yet begun.

been restricted to maximum charges only slightly, if at all, higher than those permitted to the great companies in whose districts they respectively lie.

I still believe that in 1896 it was reasonable to think that light railways had a future before them. Powers were given under the Act to the Treasury and the local authorities to render financial assistance. The Treasury might help either by free grant or by loan; the local authority might either make loans or take shares. In practice public assistance has been negligible. Such Treasury help as has been given has been mainly not by grant but by loan, and the private investor was hardly encouraged by the fact that he could get nothing till the Treasury had been paid its interest and arrears to the last penny. If any local authority ever offered to take the risk of subscribing for shares side by side with the philanthropic landowner, I have not heard of the case. But that is what would have happened on the Continent. And in 1896 money was cheap. It could then have been raised on the basis of an estimated profit of four per cent.; it could now hardly be obtainable for a certain six per cent. Then it was possible to hope that in the common interest everybody, Government, local authorities, and great railway companies, would combine with the light railway promoters to make construction and working as simple and as inexpensive as possible. The contrary has been the case.

In Belgium, France, or Lombardy the light railway runs on the main road into the market town, and turns out its passengers in front of the town hall, so that the farmer's wife with her basket of butter and eggs and poultry has only twenty yards to walk to her stall in the market place. Here the light railway is expected to buy land and build a station on the outskirts of the town, and the market woman has to walk perhaps half a mile with her baskets. On the Continent no one would dream of the luxury of separate passenger trains. Passengers and coal and hay all travel contentedly side by side. Here the regulations for working mixed trains are so burdensome that in fact the goods are worked separately, and the result is that the company can only afford to run two passenger trains a day, and the development of the service is naturally starved. Again, on the Continent the light railway runs into the goods yard of the main line company, and makes its

junction, where the gauge is the same, over a hand-switch that costs a few pounds to put in. Here, if a light railway ventures to approach the line of one of the great companies, it is met with a demand for block signals and inter-locked switches, with ground-discs and rising-bars and detector-locks and all the other expensive paraphernalia, no doubt entirely justified on main lines but imposing an impossible burden upon petty local undertakings. That, further, light railways are forbidden to charge more per mile than main line railways has already been mentioned. And the people of England are content to have it so. In other words, experience has proved that in this country construction is so costly, receipts so low, partly owing to slow development of traffic through infrequent service, partly owing to the drastic restriction of the rates charged, and operating so expensive, owing to unnecessarily strict regulations, that continental experience of light railways that have developed and paid their way is beside the point.

If we build light railways here we must expect them to earn barely enough to pay their own working expenses, and to leave little or nothing over for interest on capital. Below is a summary of the accounts for the last published year, 1913, of all the independent light railways in Great Britain, taken from the Board of Trade Returns. This table shows an average return on eight separate undertakings of, roughly, $1\frac{1}{3}$ per cent. on invested capital.

	Mileage	Gross Receipts	Working Expenses	Capital	Percentage. Net Receipts to Capital
Campbeltown and Macrihanish	$6\frac{3}{8}$	£2,867	£2,306	£29,000	1·90
Cleobury Mortimer - -	12	6,450	3,398	114,000	2·68
Corringham - - -	$2\frac{7}{8}$	2,274	1,280	14,300	6·95
Derwent Valley - - -	16	2,693	2,420	89,000	·30
Kent and East Sussex - -	23	9,316	6,451	196,000	1·46
Mid Suffolk - - -	19	5,817	4,872	190,000	·49
North Sunderland - -	4	1,900	1,148	28,000	2·68
Snail Beach - - - -	$3\frac{1}{5}$	343	341	26,000	.007
Total -	$86\frac{1}{2}$	31,660	22,216	686,300	Avg. 1·37%

The Corringham railway, under three miles in length, though nominally a public railway is really what is called in the United States a ' plant facility,' that is, a line built to connect

a works with the main railway system of the country. Of the other seven, only one has a capital below £5,000 a mile; five of the seven range from £7,000 to £10,000. The result is shown in the interest earned. The expenditure per mile—almost exactly £5 a week—is certainly low, but is obtained by running a minimum service and starving the traffic; £7 per mile per week gross receipts is far lower than would be obtained in a thickly populated country like this with a reasonable service. One railway alone, the Cleobury line, shows reasonable gross and net receipts according to continental standards. But it really lives on the Clee Hill granite traffic and only runs six passenger trains each way per week—one on Mondays and Fridays, two on Wednesdays and Saturdays, and none on Tuesdays or Thursdays—and as a revenue-earning concern it is badly handicapped by its enormous capitalization.

It is evident then from these figures that the construction of light railways in Great Britain by independent companies is out of the question as a commercial proposition. But it may be said that the figures do not prove that similar undertakings might not be profitable in the hands of great companies, which not only could work them more cheaply, but could reckon on the contributive value of the light railway traffic over the existing lines. This answer cannot be brought to the test of figures, for separate figures are non-existent. But it may safely be said that unless a railway can get sufficient traffic to justify at least three or four trains a day, it is a losing concern; that is, the margin of receipts over expenditure will not be large enough to meet the interest on the capital cost. There are two lines in Scotland which, though they were not built under the Light Railways Act, may fairly be taken as of the light railway class. The Skye line of the Highland Railway, from Dingwall to Kyle of Lochalsh, is over sixty miles long and has been open for forty years. There is one passenger train each way daily. The West Highland extension of the North British Railway to Fort William and Mallaig has been open for twenty years. On the whole stretch of over a hundred miles from Crianlarich to Mallaig there is also one passenger train each way per diem.

The experience of Ireland is to the same effect. So far as net earnings are concerned the Irish experience is even more

lamentable than that of Great Britain. As for capital, the position is entirely different: for whereas in Great Britain the matter has been almost wholly left to private enterprise, in Ireland the whole of the money has been found by the public. There are two classes of light railways in Ireland: those built under the Tramways (Ireland) Acts 1860-1883, and those built under what is known as the Balfour Act of 1889. The capital of the railways of the former class is guaranteed, half by the baronies supposed to be benefited, and half by the Treasury. Most of the lines of the former class are worked independently, but some have passed into the hands of the big companies. The capital for all the lines of the latter class was wholly found by the Treasury as a free gift to an existing company on condition that it undertook to work the line when completed. There are ten of the former class still independent. Their total length is 204 miles; their capital, £901,000, say £4,500 per mile; their gross receipts in 1913 were £78,864, and their working expenses were £79,210. As for the remaining light railways worked by the big companies, no separate figures of receipts and expenditure are published. But even without figures it would be safe to conclude, merely from the fact of the minimum train service given, that even as a free gift many of these lines are a *damnosa hereditas* to the company that has undertaken to work them.

We may conclude then that light railways in the United Kingdom do not constitute an enterprise likely to attract private capital or to justify the expenditure of public capital under present conditions. Theoretically a good deal might be done to reduce capital cost, to reduce working expenses, and thereby not merely produce a larger net income but also make it profitable to run a more adequate train service, resulting not merely in still further increasing the net income, but also in better development of the resources of the district. But twenty years' experience seems to show that the British public will not have it so. People who on the Continent contentedly climb into the coaches from the ground level, here expect high platforms. And high platforms are expensive. Motorists who in France or Italy contentedly stand waiting for 20 minutes till the crossing gates are opened, here expect over-bridges or under-bridges. And over-bridges and under-bridges cost a good deal of money. Apparently we must

continue to expect unnecessarily expensive construction and unnecessarily expensive maintenance and operation. And yet in spite of this, in Scotland at least a plentiful crop of light railway promotions is promised after the war.* Lord Leverhulme proposes, we are told, to build 100 miles of electric railways to serve the fishing industries of the island of Lewis. No less than ten railways are projected in Aberdeenshire and along the Moray coast, not to mention a line along Loch Awe and a line in Wigtownshire from Stranraer to Drummore. Now, without of course attempting to prejudge the possibilities of any particular line, which obviously can only be done with local knowledge, I venture to say that all these light railway projects should be regarded with grave suspicion. Of course, if a millionaire thinks fit to build 100 miles of line at his own expense, that is his affair and there is no reason why anyone should stop him. But there was a millionaire who built a line some twenty years ago from Invergarry to Fort Augustus at a cost of £322,000, and so little did it do to develop the resources of the country that the gross receipts failed to cover the working expenses; the millionaire grew tired of throwing good money after bad, and he closed it to traffic.

A word must be said about the suggestion of Sir John Aspinall, a distinguished railway engineer. He says:

> 'There are many hundreds of miles of 60 centimetre gauge railways, which have been laid by the British in France, together with thousands of trucks and locomotives. When these are brought home they might well be used for a well-thought-out scheme of agricultural lines. They should not in any way be hampered by existing light railway or tramway legislation, but should be constructed under new rules, which should be formulated to enable them to be built in the most economical way, and thus avoid having their first cost overweighted with unnecessary requirements.'

If Sir John is referring to light railways of some considerable length dealing with public traffic, I see no prospect of his being able to get rid of the existing legislation and the existing requirements. Even if he could, it is very questionable whether it would not be wiser on the whole to build with new material to the full gauge; and whether salvaged material for a two

* See 'Light Railways in Scotland: Schemes of Development,' 'Times Engineering Supplement,' September, 1918.

feet gauge would not be dear at any price. If he is only proposing to use the material for what may be called the domestic purposes of a farm, or the internal purposes of a works, the suggestion is more feasible. Decauville railways are common enough in other countries on farms and sugar plantations, and in other industrial undertakings.

The doubts above expressed as to the value of light railways are strengthened by the appearance of a rival agency in the field. Since 1896 the coming of the mechanically propelled road vehicle has revolutionized the whole question of local transport. Where heavy bulk traffic in coal, ore, stone, or the like has to be dealt with, the advantage, indeed the necessity, of a railway is unquestionable. But for passenger and parcel traffic, for miscellaneous merchandise, even for agricultural requirements in normal English quantities, it is possible that road transport will be found to be cheaper, and it is quite certain that it will be more convenient. We may take it that our high roads will in any case have to be brought up to a standard that will enable them to bear the weight of heavy vehicles, which anybody has at present the right to put on them if he thinks fit. And once a road is brought up to this standard, a dozen heavy vehicles per day more or less passing over it mean no new capital and very little extra expense for maintenance. A new light railway, costing, say, £7,000 a mile at six per cent., means £420 per annum for interest, and implies, say, £55 a year for maintenance of the track and its accessories. Of course, when you have got your track, railway haulage per ton per mile, or per passenger per mile, is very much cheaper than road haulage can ever be. But unless the initial charge of £475 per annum per mile can be spread over a great many passengers and a great many tons of goods, road haulage may still win, even if it is debited, as in fairness it should be, with a proportion of the cost of the highway. Moreover, the public would be far better served if instead of the light railway with two passenger and one goods train each way daily, you had five lorry and five motor bus services. Five passenger services and five services for general goods per day, assuming the passenger vehicles to accommodate twenty persons, and the lorries to carry three tons, would be more than ample to deal with the normal traffic of any country district that has not got a railway already. When the

farmer wants to put his hay or his corn or his roots on the railway, he will do as he does at present, and haul it with his own horses (or in the near future with his motor tractor) when they cannot work on the land, and he will bring back his coal and his feeding stuffs and artificials in the empty wagons.

The capital cost of a motor service beyond the actual purchase of the vehicles themselves is almost negligible, and the number of vehicles can be proportioned to the public demands for their use; whereas the railway goes on costing £475 a mile per annum, without allowing for the purchase of rolling stock, however little use the public make of it. A very rough estimate would probably put the average cost of running the road vehicle—assuming normal prices—at something like 18*d.* per mile. In favourable districts this might be covered by the receipts, for both fares and charges would reasonably be at a higher rate than on a railway. It is better worth anybody's while to be carried from the market place to his own door four miles off for 6*d.* than the same distance between two stations for 4*d.*, if the 4*d.* implies two miles' walk in addition. As for goods, the charge by lorry would in most cases replace not only the railway charge for carriage but the cost of hauling to or from the station in addition. Further, the lorry can perform services that the light railway can never do. The railway is limited to few trains, and the hours that suit the passengers are not the hours that best suit the milk, etc. In districts where the traffic was not likely to suffice to cover the cost of a motor service, still less would it cover that of a light railway, and if for good cause shown the State decided to subsidize locomotion in such districts, the cost would be immensely less than that involved in subsidizing light railways.

To sum up in a few lines the purport of this article, capital after the war will be badly needed, hard to come by, and costly to obtain. We must therefore make the most provident use we can of the capital already spent; invest new capital only to supplement, and not to compete with, the capital already invested in transport. Speaking broadly, there is no justification for expenditure on canals except for minor and inexpensive improvements. Nor is there any justification, whatever may be the case in particular instances, for any general policy of light railway construction. If transport

which can not directly pay the whole of its own cost is to be assisted from public funds, less money will be needed, and greater public benefit will be obtained, if these funds are devoted to the encouragement of road transport. We shall do well to go slow, very slow, in the matter of canals and light railways ; we shall do well to pay serious attention to the question of the development of motor transport.

W. M. Acworth.

COAL CONSERVATION

1. **Final Report of the Coal Conservation Committee.** Ministry of Reconstruction. 1918.
2. **Report of the Fuel Research Board.** Department of Scientific and Industrial Research. 1917, 1918.

A BELIEF is coming to the fore that in many of our principal industries neither commercial competition nor voluntary co-operation is sufficient by itself to bring those industries into the high state of efficiency which the national welfare demands. It is argued that the long view which a nation ought to take is not natural to individuals working for immediate or early profits, and that however far-sighted and enlightened private management may be from the commercial point of view it tends to ignore those future consequences of present activities, the effects of which are likely to fall not upon the commercial concern itself but upon the nation as a whole. There is at least a plausible basis for this creed, and if we hesitate to take steps to give effect to its consequential demands it is because we doubt the capacity of our national councils to improve upon the results of our individualistic system, and because we fear the inevitable alternative to individual enterprise, namely the bureaucratic endowment of mediocrity.

The report of the Coal Conservation Committee may well inspire both the belief and the fear. The enquiry originated no doubt in the conviction that we were not making the best use of our great national reservoir of heat energy, that we were likely to want it badly in a future not very remote, and were tapping it too freely and wastefully. The Committee was appointed by Mr. Asquith in 1916 as a Sub-Committee of the Reconstruction Committee, with Lord Haldane as chairman, and was asked to consider what improvements can be effected in the present method of mining and using coal, and whether it is desirable to take any steps in the near

future to secure the development of new coalfields or extension of coalfields already being worked. The terms of reference were felt by the Committee to be so wide as to necessitate the appointment of five Sub-Committees, each of which considered the matter from its own point of view, and the reports of these Sub-Committees are collected as forming, together with a preliminary explanation, the substantive report of the Committee upon the questions referred to them. The whole Committee concurs in the conclusions of its parts, and adopts their recommendations as its own. In so doing it succumbs apparently to the temptation of following the path of least resistance, and avoids some of the difficulties which it would have encountered if it had attempted to summarize the conclusions and recommendations in one report. Sectional and even individual opinion is given expression without the recognition of any necessity for reconciling the difference of detail and sometimes of principle implied. This may have been found the only practicable method, but it has an obvious disadvantage in so far as the report is expected to justify and indicate the way to action. Thus while the Power Generation and Transmission Sub-Committee points to great central stations generating power by steam and collecting surplus gas and waste heat as the proximate ideal, and asks that large powers of compulsion should be granted to officials for the purpose of realizing that ideal, the Carbonization Sub-Committee is evidently of the opinion that steel-works and coke-ovens should be so combined and laid out as to use their own gas and heat for the generation of all the power they require in gas engines.

It was plain from the first that many questions within the scope of the enquiry could not be decided on the basis of existing knowledge, but necessarily involved research which a Committee with no permanent staff or other resources for the purpose could not undertake. The importance and immediate necessity of what is described as a ' Chemical survey of ' the coalfields of this country ' was recognized, and ultimately the Government met the difficulty by the establishment of a Fuel Research Board with Sir George Beilby as director.

There is one portion of the Carbonization Sub-Committee's report which raises economic problems of a far-reaching

character. This is the suggested reservation of the best seams of British coking coal in the future interest of our iron industry, with the accompanying condemnation of the shipping of first class coking coal for bunker and other purposes, as has been done in the past to the alleged serious waste of our national resources. The question is obviously both important and difficult. If the coal owner is not to be permitted to sell this coal to the shipping industry, is he to place it on the limited market of an already well-provided iron industry, thus lowering the price, or is he to be debarred from now realizing his property at all because at some future time the steel industry may want such coal badly? It may of course be argued that future technical developments in the iron industry are liable at any time to rob such a special class of coal of its exceptional value, and that by not realizing now a loss will have been incurred to no purpose; but that is not quite sound, because from the national point of view an insurance will have been effected over the period against a possible serious loss. On the whole, it is safer to assume the continuance of present need until such new processes or supplies as would alter the situation are actually in sight. But to compel the owners of a recognized form of property to withhold it from the market would involve financial adjustments of a very special kind which our legislature has always displayed a well-founded reluctance to adopt, and would require the most careful consideration. The problem is undoubtedly a real one and should be faced. The present writer is however more especially concerned with the utilization of coal from the chemical and thermal standpoint, and it is that aspect of the report with which he proposes to deal at some length.

The place of honour in the report and the largest type are given to the interim report of the Sub-Committee on Power Generation and Transmission. If the Sub-Committee had accepted as its work the comparison of electricity and other agents for the supply of power and other forms of energy it would have done a great service. But although careful consideration may have been given to such comparison, the impression which the report creates is that the Sub-Committee decided that they could best perform their function by putting forward what they regarded as the measures which ought to be taken to improve the electrical supply of the country,

with a view to its providing power, heat, and light. The work of the Sub-Committee has really resolved itself into stating a case for the establishing of large central electric supply stations equipped with steam-turbines, and for the appointment of Electricity Commissioners with extensive powers. Their argument may be followed out with advantage and, as far as possible, in their own words. In the first place, the coal available in the United Kingdom is not unlimited. Although the figure of actually available coal may be taken as 580 times our present annual output, the serious aspect of the coal question for Great Britain is not how long can our reserves possibly last, having regard to the probable long continuation of the present upward tendency of our annual output, but how long can we continue to get the available coal at a cost which will not place us as a nation at a disadvantage relative to our nearest competitors. The present coal consumption would, if used economically, produce at least three times the present amount of power, but the only way to increase prosperity in the country is to increase the net output of the workers employed; and although it is possible to do that by harder work on the part of the individual, there is far greater promise in increasing his output by giving him more machinery to multiply the effectiveness of his efforts. It is not so much by reducing our coal consumption as by increasing our industrial output for a given coal consumption that progress will be made. Hence the growing importance of having available an adequate and cheap supply of power produced with the greatest economy of fuel. The present use of motive power per employee is only half that in the United States.

The coal used in the production of motive power in the United Kingdom at the present time is estimated by the Sub-Committee at 80,000,000 tons per annum, equivalent in value to, say, £40,000,000 at pit-head. It is no easy matter to arrive at any high degree of accuracy in any such estimate, and the conclusion is stated with a degree of apparent confidence which does not seem to be justified by the method of its establishment. In 1903, according to the Coal Commissioners' Report, the total home consumption of coal was as follows :

COAL CONSUMPTION, 1903.

	Tons
Railways	13,000,000
Coasting steamers (bunkers)	2,000,000
Factories	53,000,000
Mines	18,000,000
Iron and steel industries	28,000,000
Other metals and minerals	1,000,000
Brick works, potteries, glass works, and chemical works	5,000,000
Gas works	15,000,000
Domestic	32,000,000
Total home consumption	167,000,000

The estimated total for 1913 was higher (say, 189,000,000 tons). The Sub-Committee believe it would be feasible to reduce the coal required for power production from 5 lbs. per h.p. hour to 1½ lbs., which would result in an annual saving of 56,000,000 tons. If the coal so saved were used for the production of further power it would be possible from the aggregate of 80,000,000 tons above quoted to generate continuously throughout the year not less than 13,600,000 h.p., which would more than compensate for our lack of water power, and admit of the manufacture here of many products which are at present only made in America and on the Continent.

In considering how the large economies indicated are to be secured the Sub-Committee assumes that the convenience and efficiency of the electric motor have been so clearly established that it is only a question of time for all power to be supplied in this way. Thus the problem becomes how best to supply electricity to the motor, and powerful arguments are brought forward in support of the collective method in which the demands of a great number of factories, including different industries, are all supplied in common, as against the individualistic method in which each manufacturer generates his own power, usually in a power station situated in his works. This matter has been dealt with so often that the case may be taken as not only made out up to a certain point, but as generally comprehended. Already, indeed, the advantages obtainable have led to the establishment of central supply on an appreciable scale. On the other hand, it must be realized that even now the total annual amount of coal used

in the United Kingdom for the production of power through the medium of electricity is at most some 8,000,000 or 9,000,000 tons as against the estimated total of 80,000,000 tons used for power purposes of all kinds.

Management by local authorities is regarded by the Committee with marked disfavour. Their power stations are said to have been primarily selected from the point of view of retaining the works within the city area, so that the ' rates,' on such works may be retained also. The undertakings of Birmingham, Liverpool, Manchester, and Sheffield all come under criticism as lacking provision for cooling. It is interesting to note that on account of the high vacuum requirements for most economical working of a steam-turbine, and the efficient condensation required to maintain it, the supply of cooling water seems to have assumed a position of dominating importance in connexion with power stations of this type. It outweighs such factors as the nearness of the coal supply, and transfers the location of the ideal site, for the time being, from the pit-head to the river-bank. Many existing plants even of the larger class are not approved, and the scheme recommended is the erection on roomy and efficient sites, away from industrial centres, of new ' super-stations ' to meet the following conditions:

1. ' The power users in each industrial district must be supplied from one common inter-connected electrical power distribution system.
2. ' Large generating machines, not less than 20,000 horse-power, must be used, and they must be erected in the best possible positions for economical production. In the more important industrial districts generating machines of 50,000 horse-power might be advantageously used.
3. ' Power available from surplus gas or waste heat should be turned into electrical energy on the spot in local plants, which would feed into the main distribution system. N.B.—As regards waste coal—i.e., coal which it does not at present pay to bring to the surface—this could, where transport was the ruling consideration, also be used on the spot.'

It is claimed that by such dispositions other advantages may be secured. The health of the great industrial centres would be improved by converting coal into motive power at some distance from them, and by-products could be obtained from

the coal in any case when it was proved economical to do so. The value of the nitrogenous fertilizers, motor spirit, and fuel oil obtainable from coal is an important factor in the whole situation, to which further reference will be made later on. The obvious economies to be realized by a central supply of all the power required in a given district have evidently encouraged the Sub-Committee to extend their claims beyond even the above wide limits. The report goes on to state that it is only by supplying all the needs of the community that the maximum use can be made of the plant, and that ' the ' economy of a combination of all requirements, power, traction, ' lighting, and heating is fundamental.' At this point the report is rather obscure, but so far as it implies that the economical supply of power by the proposed central stations and distributing systems is dependent on the condition that they must play a prominent part in such matters as domestic and industrial heating, it is a damaging confession, for, as will be shown, the proposed centralized system is particularly ill adapted for these purposes.

The Sub-Committee have no hesitation in demanding monopoly of control.

' While it might be feasible for local concerns, whether municipal or company, to retain, as separate bodies, the ownership of mains and the business of supplying lighting and small power consumers, the generation and main transmission and distribution of electrical energy, and the business of supplying power to manufacturers, railways, and other large users, must, in each industrial district, be in the hands of one organization.'

If all is done as the Sub-Committee desires great things are promised. There is first the prospective saving of £28,000,000 per annum, arrived at by estimating the coal consumption for power purposes at 80,000,000 tons per annum, and assuming that the whole of this power is supplied from the new central stations with a coal consumption of 1½ lbs. instead of 5 lbs. per h.p. hour. Then comes a summary of other advantages, most of which have been indicated. To attach a financial value to these items in turn, and indeed to know in some cases whether it should be plus or minus, would have offered some difficulty, and the Sub-Committee content themselves with an estimated total of imposing roundness in the following

words: 'All these savings and advantages taken together 'show a total possible national advantage which can hardly 'be put at less than £100,000,000 per annum, apart from the 'manufacturing and industrial advantages of a cheap and 'efficient electric power supply.'

It will have been gathered from the foregoing that the Sub-Committee are quite convinced that our existing arrangements for power supply are unworthy of the country and its future, and have definite ideas as to what should be done.

The contemplated economies are not to be had without disturbance in existing arrangements, and the Sub-Committee display no hesitancy in proposing to scrap existing plant and to supersede existing control. The country is to be divided into sixteen districts, in each of which is to be one authority dealing with all generation and main distribution. Large power stations are to be erected away from too densely populated centres, and designed so that as methods are perfected for extracting by-products from the fuel, before using it for the purpose of the production of electric power, the by-product plant can be combined with the power plant. Power available from surplus gas and waste heat is to be turned into electrical energy on the spot in local plants feeding the main distributing system, and low-quality coal which it does not at present pay to bring to the surface may, where transport is the ruling consideration, be used on the spot where suitable plants are in existence. Existing authorities can then stop extensions of their own uneconomical stations, and arrange to take power from the main system. To carry out these schemes it is proposed that a Board of Electricity Commissioners should be appointed, with full powers to deal with the electricity supply situation throughout the country. They should have power, *inter alia*,

(*a*) To stop the extension or multiplication of uneconomical stations for public supply.

(*b*) To arrange for the handing over, on equitable terms, of the generation, transmission, and main distribution system in each of the areas into which the country is to be divided, to a new electricity body appointed for that area.

(*c*) To standardize for each area the frequency and voltage of the main transmission and distribution system.

(*d*) To settle for each area whether such body should consist of a parliamentary company working under adequate control as

regards limitations of dividends, etc., or one of the other alternatives given in an appendix.

On this fourth point the Sub-Committee remark that ' the ' freedom of range and keenness which are distinctive of private ' enterprise will be found to be in a high degree conducive ' to the fullest measure of success.'

Finally, the Sub-Committee consider that State assistance in some form may be necessary.

These proposals are of such a high degree of importance that they have been set out here in some detail, along with the chief steps in the argument leading up to them. They involve very heavy expenditure and an almost unprecedented monopoly. It is an interesting question as to how far the promised results could be obtained generally, as they have already, on the authority of the Sub-Committee, been obtained in the particular case of the North-East Coast Electric Power Co., by more ordinary commercial methods. Also it may be asked whether complete condemnation of the largest existing plants, equipped as some of them are with the largest steam-turbines yet proved practicable, and with complete technical supervision, is justified. These things are not likely to be taken for granted without full enquiry.

What, however, interests the present writer more particularly is how far the claims of the Sub-Committee can be sustained in their contention that the methods they propose are, from the point of view of coal conservation, the best available for the public supply of power and other forms of energy. This issue cannot be omitted because the Sub-Committee include it, and because their argument and estimate of saving are partially based upon it. What is involved is the very general question of the ultimate economy of electricity, generated and distributed from large central stations equipped with steam-turbines, as an agent for the supply of power, heat, and light, when the source of the electrical energy is coal. It is plainly necessary to institute some comparison between electricity and other agents when used for the same purposes. Thermal efficiency is the primary factor, but utilization of the chemical value of coal must also be taken into account. What, then, is the position of electricity as regards the thermal efficiency of its generation ?

This can be briefly stated. On the assumption that the coal consumption is reduced to the $1\frac{1}{2}$ lbs. per h.p. hour, then from an average quality of coal 19,500* British thermal units must be expended in order to supply 2,544† British thermal units to the consumer—an efficiency of 13·0 per cent., and a waste of 87 per cent. Although electricity is so convenient in use for many purposes, and suggests to the popular mind the ultra-scientific, and although the electric motor is really a very efficient appliance, it is not generally nor sufficiently recognized that the generation of electricity through the best of steam engines is a process which wastes this very large proportion of the energy supplied. To supply all our power requirements by such a process is to be content with a low level of attainment, and although the Power Sub-Committee recommend it with the general endorsement of the main Committee, the Carbonization Sub-Committee are driven by the force of facts to the expression in their report of a suggestive qualification:

'While electric power engineers are practically agreed that the only feasible method of power production in large central stations is by the use of large turbo-generator units, the Sub-Committee consider that there is a definite field for the use of gas engines in special circumstances and in cases where the most suitable units are of relatively small size, say under 3,000 to 4,000 kw. They hope and believe that the design and production of internal combustion engines will be greatly forwarded by researches which are already in progress.'

At the back of this opinion stands the relatively high thermal efficiency of the gas engine, which may be taken at 25 to 30 per cent. It should be fully appreciated that the present popularity of the steam-turbine with the power station engineer is based upon its practicability, in large sizes occupying little room, and on its immunity from break-down, but not upon its fuel economy except as compared with other steam engines. This justified its acceptance as the best available power producer for large central stations, but it is by no means

* Average heating value of coal being 13,000 B.T.U. per lb., $1\frac{1}{2}$ lbs. contain 19,500 B.T.U.

† The heat equivalent of 1 h.p. hour assuming 100 per cent. efficiency in transformation is 2,544 B.T.U.

an ideal for that purpose and still less as the generator of all power. Rebellion against any such idea is evident in Mr. Talbot's useful notes upon 'Fuel Economy in Modern Steel 'Works' (printed as an appendix to the Carbonization Sub-Committee's report), in which the large gas engine is the prime mover plainly favoured. It may be noted here that the developments indicated by Mr. Talbot, Prof. Bone, and the Carbonization Sub-Committee as necessary for the fuel economy of our steel industry require the establishment of large self-contained units, including coke ovens, blast furnaces, steel furnaces, and rolling plant. But if such economies were generally realized in this and other industries a central power station would no longer be able to lighten its generating costs by drawing upon waste heat to the extent that it can to-day. The North-East Coast Electric Power Co. receives special approbation in the Sub-Committee's report as an example of what is done already, but the local conditions governing power supply in the district include 'the existence 'of large quantities of potential energy in the form of waste 'heat and combustible gas from coke ovens, blast furnaces, 'and the exhaust of steam-driven blowing engines.' The coal saving to the company from this source is estimated at 150,000 tons per annum, and it is so much to the good, but has the disadvantage from one standpoint, that this particular economy of the central station is conditioned by the neglect or non-realization of the larger economies contemplated in such works-efficiency schemes as those of Mr. Talbot.

On the whole, however, the proposals of the Power Sub-Committee will probably be generally approved in the sense that they call for the centralization and consequent averaging effect of the industrial power load, that they seek to carry that load by the most practicable large unit generator known up to the present, the steam-turbine, and urge the necessity that incompetence, unwarranted intrusion of politics, or narrow views on the part of local authorities should not be free to block the way. On the other hand, this Sub-Committee's proposals are likely to meet with rigid demands for demonstration of their justice in so far as they imply that practically none of the existing power plants are fit to be used for generation. It will obviously also be necessary to ensure that Electricity Commissioners shall not employ their extensive

powers for the extinction or prohibition of more economical power generation than that of their own providing, nor shall assume that their own method of large scale power generation is anything more than the least unsatisfactory yet devised. It may be interesting, perhaps painfully interesting, if and when the Commissioners are appointed to ponder over their individual competence to decide the very complicated technical and commercial questions which they are expected to be able to answer so wisely, and which may affect so vitally both public and private interests. The super-station after all is more easily provided than the super-man.

Moreover, although it may be sound to regard the system approved by the Sub-Committee, with the qualifications just expressed, as economical and generally satisfactory for the supply of power for industrial needs, as soon as the Sub-Committee has pegged out this claim and proceeds (on its way to the £100,000,000) to speak of what it can do in some other fields, the time has come for direct questioning and denial. It is true that when the possible saving in coal consumption for domestic purposes (the estimated consumption for such purposes being 35,000,000 tons per annum) is claimed as one of these additional advantages the situation is saved by the use of ' possible.' It is true that when we learn of ' the great ' advantages and economies which would result from the more ' extended use of electricity in the household for heating, ' cooking, and cleaning purposes in the way of labour-saving ' devices, reduction of smoke, increased cleanliness, etc.,' the direct claim to coal conservation is avoided. But the implication is plain, and it is permissible to wonder for how much of the greatly enlarged total of £100,000,000 these two items are responsible.

To come to plain facts, no case has ever been made out, or is likely to be made out, for fuel economy by using electricity for domestic heating. The simple reason is the very wasteful character of the process of generating electricity involving as above quoted the use (or misuse) of a hundred units of heat at the power station in order to deliver thirteen to the consumers. That is all the Sub-Committees hope to do, and existing electrical practice is a long way behind it. The performance of electricity as a heating agent in the home is not only a poor one absolutely, but relatively also. The coal fire,

to make the most obvious comparison, radiates on a rough average about 25 per cent. of the total heat of the coal into the room—twice as much as the electrical current delivers—and the remainder is by no means entirely wasted. If, however, we are to work towards the ideal of smokeless cities, and recover the chemical value of coal, concerning which little has as yet been said, the open coal fire must go.

Fortunately the remedy is to hand. If coal is carbonized as in gas works practice the process is effected with a thermal efficiency which reaches 80 per cent. in good and 70 per cent. in average practice. This means that for every 100 heat units in the original coal, after making allowance for the heating necessary to carbonize it, 70 units are still available in gas, coke, and tar, while useful chemicals are extracted at the same time. The distribution of gas is a simple matter, and is effected with a much smaller loss than that of electricity. When gas is put into use as a heating agent there are none of the excessive losses we have had to take note of in the case of electricity. In a modern gas fire, as has been amply demonstrated at the University of Leeds and elsewhere, about 50 per cent. of the total heating value of the gas is radiated into the room, 25 per cent. goes up the chimney, and the remainder heats the room and its contents by conduction and convection. Even the 25 per cent. which goes up the chimney is not lost, since its ventilating effect is not only desirable but essential to health, and if the fire is properly fitted 10,000 c. ft. of air per hour can be moved through the room by this agency. A simple calculation will show that, even taking the heat in the chimney gas as loss, the combined heat efficiency of the gas works and the gas fire is very approximately 50 per cent. as against 13 per cent. for the heat efficiency obtainable from electricity, even when the promised efficiency of the super-station is obtained. This is actually an understatement of the real case, since the electric heater is here credited with an efficiency of 100 per cent., while it certainly does not radiate anything like that amount, and all calculations on that assumption neglect entirely the necessity for ventilation. So long as the electric heater is confined to very occasional and limited use, neither ventilation nor economy may matter very much, but that position cannot be maintained as regards an apparatus for general domestic heating.

Gas works practice in the past has been limited by the standard imposed before the introduction of the incandescent mantle for lighting, and before gaseous heating assumed its present proportions. The result of this limitation was that the gas had to be highly luminous when used without mantles, and in effect had to be made in a particular manner—by heating to a moderate temperature in a closed retort. The luminosity was largely due to benzene and toluene, but under stress of war the gas works were required to extract a large proportion of these constituents for the production of high explosives. An all-round relaxation of the old standards had to be allowed, and there are reasons of paramount importance why they should not be reimposed.

It is plain from what has been put forward above that room-heating by gas is a thermally efficient process. Its comparison with electricity has shown an overwhelming advantage. The gas fire when in use is twice as efficient as the coal fire, lighted and burning freely. But because it can be turned down to any desired extent when a proper room temperature has been reached, and can be started and stopped by turning a tap, the actual economy is much greater than this, apart from advantages in cleanliness, freedom from smoke, and labour saving. The comparison made already for the gas fire as against the electric heater could be extended to water-heating by ring burners, cookers, and other forms of domestic and industrial apparatus with the same result. It is, moreover, so far a comparison between the established practice of the gas works on the one hand and the prospective performance of the electric super-station on the other.

If, however, we are to realize the full advantage of public gas supply there is more to be done. The maintenance of the old illuminating standards limited the manufacturing methods largely to carbonizing in retorts which gave some 25 per cent. of the total heat of the coal in the form of gas, with 50 per cent. in the coke. It is quite true that coke is an excellent solid fuel, and has the advantage over raw coal of undergoing smokeless combustion, but the realization of the highest thermal efficiency and maximum coal conservation would require that a larger proportion of the total heat should be obtained in the form of gas, and one of the most obvious and practicable methods of doing this is by gasification of the coke.

No speculative process is necessary for the purpose. Coke can be and is widely converted into water gas to-day in the well known plants of Lowe, Dellwik, and Kramer and Aarts with a heat efficiency of 70 per cent. Hitherto, however, the proportion of water gas mixed with the ordinary town gas from retorts has been quite small, for the dominant reason that water gas, although an excellent heating agent, is non-luminous unless, by the process known as carburetting, luminous hydrocarbons are admixed. This adds too much to its cost, and, what is important for our purpose, lowers the thermal efficiency of its manufacture.

A second reason is that the heating value of water gas in thermal units per c. ft. is at the best much lower than that of a good coal gas. Taking 600 British thermal units as the heating value of a c. ft. of a good coal gas, and 300 for water gas, which figures are quite reasonable, it will be seen that if a mixture containing water gas and coal gas in equal volumes is used, it will have a heating value of 450 B.T.U. per c. ft., and if it contains two-thirds water gas the heating value will be 400. From the latter mixture, as a simple calculation will show, approximately 50 per cent. of the heating value of the coal would be obtained in the gas.* That would be a great advantage. Against it might be urged, in the first place, that the carbon-monoxide content (about 30 per cent.) would be too high for public safety, having regard to the poisonous nature of this gas. The danger is probably exaggerated, but the matter requires attention. A gas leak is always dangerous, and the most effective manner of precaution is probably to insist that any gas distributed

*A ton of coal will yield 12,000 c. ft. of coal gas and more than enough coke to yield 24,000 c. ft. of water gas. This mixture, if we take the heating value of coal gas at 600 B.T.U. and of water gas at 300, will have a total heating value of 14,400,000 B.T.U., or 49·5 per cent. of the theoretical heating value of the ton of coal, namely, 29,120,000 B.T.U. at 13,000 B.T.U. per lb. It would be possible to obtain a mixed gas containing more than 50 per cent. of the heating value of the coal by gasifying more coke, but this would reduce the heating value of the mixture per c. ft. This calculation must not be confused with the statement made a few paragraphs earlier that the gasifying process secures in average practice 70 per cent. of the heat value of the coal in the shape of gas, coke, and tar.

for domestic use must carry a strong and characteristic smell.

A further objection which might be urged against a gas of 400 B.T.U. quality is that it might not be so efficient in use as a richer grade. This question of the comparative efficiencies of different grades of gas is under investigation by a Committee of the Institution of Gas Engineers ; the University of Leeds is collaborating on the technical side. It is of primary importance that the standards of gas should be such as to allow of high efficiencies and consequent economies, without prejudicing the interests of consumers. So far as the work has gone it points to the efficiency in use of such an appliance as the gas ring for water heating or the gas fire for room warming, as being over a wide range independent of the grade of gas expressed in British thermal units per c. ft. ; that is to say, 100 heat units will do the same work whether they are supplied as one-sixth of a c. ft. of 600 B.T.U. coal gas, or as one-fourth of a c. ft. of the 400 mixture.

There are other processes which promise to modify existing practice and are pregnant with possibilities. It has been possible to develop them further during the war, while the illuminating standard has been in abeyance, than in preceding years. Although the Carbonization Sub-Committee do not seem to recognize the fact, the need for benzene and toluene which has led to the introduction of oil-washing processes and plant for their extraction, has also brought a new knowledge into the gas engineering profession on these and allied matters. Again, the need of fuel oil for the Navy, so urgent at one time during the war, has been responsible for extensive experimental carbonization on a full working scale conducted for the Department of Mineral Oil Production. At St. Helens comparative trials have been made of the influence of passing steam and other gases through the continuous vertical retort at various working temperatures, and the results obtained there, at Uddingston and elsewhere, are pointing the way to increased efficiencies and economies.* A stream of gas even chemically inert passing through the

* Some account of the technical and scientific aspects of this work was given by the present writer in the William Young Memorial Lecture at Glasgow in September, 1918.

carbonizing charge secures a high yield of gas and other chemical products; if the gas passed through the retort contains hydrogen the effect is greatly enhanced; while if it is steam, inter-action with the coke adds a large volume of water gas and increases the yield of ammonia. There is no difficulty, if need be, in the way of combining this process with the ordinary water gas process to the extent desired. Typical yields, not the most recent or the best, for steaming in vertical retorts may be averaged as 20,000 c. ft. of gas, 18 gals. tar, and 30 lbs. ammonium sulphate per ton of coal, as against 11,000 c. ft. gas, 10 gals. tar, and 25 lbs. ammonium sulphate for more normal practice in horizontal retorts.

The immediate advantage to be derived by distributing some 50 per cent. of the energy of the coal as gas can be readily estimated thus: The total domestic consumption of coal is estimated at 35,000,000 tons per annum. If the whole of it were replaced by a gas carrying 50 per cent. of the total heat energy of the coal, then, since gas is at least twice as efficient in use as raw coal, it would only be necessary to carbonize as a maximum the same quantity, 35,000,000 tons, of coal at the gas works instead of distributing it, while the residual coke would be available for replacing coal in other uses, thus effecting a real conservation of coal, and the light oil, fuel oil, and other chemicals would have been obtained in the most efficient manner known. On the other hand, even if electricity were 50 per cent. more efficient in use than gas, the direct consumption of coal in boilers at the power station with the maximum economy assumed in this report would have to be 90,000,000 tons per annum to do the same work, with no assets of coke or other by-products more valuable than clinker.

The amount of new plant required for the general gaseous heating system suggested may be gauged roughly from the datum that 15,000,000 tons of coal is the estimated consumption at the gas works of the country for 1913. The increase would be considerable, but in no sense formidable, as compared for example with the tenfold increase in capacity of existing electrical plant, which would be necessary to take the domestic load alone.

The consideration which has been given to domestic heating might be extended to industrial heating with the same result, but the outlook is more hopeful for electricity in certain

directions. There are many processes developed and developing which require a higher temperature, and particularly a higher local temperature, than can be maintained by the direct use of coal or even by burning producer-gas in regenerative furnaces. Moreover, special conditions as to atmosphere or other requirements have sometimes to be satisfied. A field of usefulness is thereby opened out which electricity has already entered and should find increasingly remunerative in cultivation. Steel refining and such manufactures as those of silica, carbide, and carborundum are examples of the successful application of electricity to high-temperature processes.

So far this discussion of coal conservation has centred mainly on thermal efficiency, but it cannot be left there. Coal is a vast chemical storehouse from which can be drawn combined nitrogen and sulphur, numerous hydrocarbons and other organic compounds, raw materials for the manufacture of fertilizers, explosives, dyes, drugs, and other chemical products increasingly essential to modern civilized life. As has already been pointed out, from this point of view the carbonization processes offer a striking and welcome contrast to the burning of coal under boilers. But in determining the commercial position of the more complicated but more efficient manner of dealing with coal the disposal of the products is of the first order of importance, and may make the difference between success and failure.

The gas works have a large and local domestic market, in which their principal product can be put to its most efficient use. Coke has its own special uses, and at the worst can replace coal for steam raising with advantage to atmospheric conditions, owing to its smokeless combustion, either in factories or power stations, the methods for that mode of employment having been worked out much more fully during the last few years. Ammonia needs no further guarantee of a market than is provided by the agricultural demand for nitrogenous manures, which for this purpose may be taken as unlimited. Coal tar is a product on which more may be said with advantage, as the position has altered in recent years in the direction of securing markets for larger quantities. Utilization as fuel was the principal outlet for tar before its importance in chemical industry was recognized. Crude tar is now relatively little

used as a fuel because usefulness in other directions has raised its price. Thus in 1909 the average price was about 13*s.* per ton, in 1913 about 30*s.* per ton, and now is from 30*s.* to 35*s.* per ton. This was due to the rise in the value of the fractions into which it can be separated by distillation and other treatment, the lighter fractions for motor spirit and chemical manufacture, creosote oils for the preservation of timber, and as fuels for engines of the Diesel type, and the pitch for the briquetting of fuels. Large quantities of these products were exported to Europe and America. At home the consumption of pitch and dehydrated tar for road-making was rapidly growing.

During the war another use has acquired a great and apparently growing importance—the use of tar oils as fuel for marine boilers, on warships in particular. The existence of any commercially considerable supply of mineral oil in this country still awaits demonstration. High grade fuel oils are produced by the distillation of Scottish shales, and similar oils could probably be produced elsewhere in England. The Scottish production, however, of heavy fuel oils in 1910 was only 150,000 tons, and an industry furnishing oil reasonably free from sulphur from English shales has yet to be established. In these circumstances the importance of tar oils as a fuel for marine purposes ready to hand has made itself felt during war-time in no uncertain manner. As compared with mineral and shale oil, tar oils have the disadvantage of a somewhat lower calorific value—16,000 B.T.U. as against over 19,000 B.T.U. per lb.—and coal tar oil may give off vapours which are more objectionable in a stokehold than those of mineral oil, but it has the solid merit of being home produced, and supplies are therefore independent of war risks and any difficulty and expense of sea transport. For this reason it seems certain that the heavier tar oils will find a profitable market as fuel oils for marine purposes, which will absorb all that the gas industry can expect to produce in the course of a reasonable development. This is of course in addition to existing markets.

The developing colour and fine chemical industries will require more benzene and toluene, phenols, etc. Any surplus of the lighter fraction will find a sure market as motor spirit. This consideration is specially important to those developments

of vertical retort practice which were touched upon earlier because they result in the production of paraffinoid tars which are not suitable for some chemical manufactures. It seems probable also that the briquetting of low grade material and coke breeze will require increasing quantities of pitch. The increased cost of fuel will lead to the closer scrutiny of methods for utilizing small and low grade fuels, for which purpose briquetting seems adapted. To this can be added the increased demand for dehydrated tars, which will follow the movement for the improvement of roads, already begun. The growth of rapid road transport seems certain, and will exact a higher standard of road building, and a consequent demand for dehydrated tar. Lastly, when all these requirements are filled, any excess of crude tar, and the thinner vertical retort tars, can probably be used as a fuel in engines of the Diesel type, which are said to develop one h.p. from less than a half pound of tar.

Plainly then the chief by-products of the gas industry—coke, ammonia, and tar—can be regarded as provided with markets, and that is so far satisfactory. But the strength of the industry and its commercial soundness are more peculiarly guaranteed by the presence of a large domestic market through which its primary product—gas—can be readily absorbed and used in a highly economical manner. Meanwhile progress along such lines as those indicated above is to be regarded both as a guarantee and a necessity of a large measure of coal conservation. One warning is necessary. If the coal conservation which technically developed gas practice promises is to be fully secured, the financial aspect of the matter will require consideration in the sense that the price of the gas must not be loaded with profits ' for the relief of rates.'

Carbonization at the power station, which is a possibility, stands on a different footing from the same process at the gas works. Where the primary purpose is to generate electricity through steam-turbines any gas obtained by carbonization would presumably have to be turned under boilers—the worst possible use to which such a high grade fuel can be put, since none of its special excellences can be utilized. It is not therefore surprising that the Committee felt reluctant to make recommendations of their own as to carbonization of coal at the power stations with recovery of by-products, but submitted

the question for the investigation and report of Sir George Beilby and the Fuel Research Board. Two reports have been issued. The Board define a number of problems before them very clearly, and seem to be concerning themselves more especially with the possibilities of carbonization at temperatures below those normally employed in gas works practice. There is no doubt that information resulting from disinterested enquiry into the results of low-temperature carbonization would be of service. A fuel research station with plant on the works scale and laboratories is being erected at East Greenwich for the use of the Board, and it is hoped that an expert staff trained there will be available to undertake the education of those who desire to adopt the new methods and appliances which the Board aims at creating.

The Carbonization Sub-Committee have rightly laid stress upon their belief that the practical realization of more scientific methods for the preparation and use of fuel will to a great extent depend on the creation of a body of scientifically and practically trained experts—students and graduates from universities and colleges who have demonstrated their fitness. Their report does not perhaps sufficiently recognize what has already been done to give effect to this sound proposition. Ten years ago the University of Leeds founded a special Fuel Department, with a chair largely endowed by the gas industry ; the example so set has been followed by the Imperial College of Science in London, and may be followed elsewhere.

The number and complexity of the problems which call for solution in the scientific utilization of fuel demand in the immediate future research and training on a scale with which no officially constituted Research Board could attempt to cope single-handed. The Fuel Research Board very wisely recognizes this, and calls for the co-operation of other workers and organizations. Unless this essential requirement of the situation is fully appreciated it will be difficult to avert a serious danger which threatens not only the fuel industries, but the whole of our scientific and technical organization.

Strangely enough, the newly awakened spirit of enterprise, with its desire for advance along scientific lines, may become itself responsible for ill-considered action, which is calculated to defeat its own purpose. Owing to the ignorance of science and its applications which has been so unfortunately

conspicuous among our politicians, our civil servants, and among those who by speech or writing influence public opinion, and to an almost equal ignorance and indifference on the part of manufacturers and others claiming to be practical men, the inducement to a student of high mental calibre to equip himself for a scientific career has been tempered throughout by the knowledge that material success was exceedingly unlikely. The inevitable consequence is now before us in the fact that the number of men in this country competent to direct or carry out scientific or industrial research is extremely limited, and must remain so for several years.

From the national point of view the urgent problem now before us is how to make the very best use of this limited personnel. There is an unfortunate tendency to assume that our needs can be met by creating and placing under the control of Government Departments and other authorities a large number of research posts, of a kind which can only be filled by men who have until now been on the teaching and research staffs of our universities. Much greater funds than the universities have at their disposal are being used for this purpose, and the consequences are already visible. If this programme is carried out blindly the result will be that the men who ought at the present time and in the immediate future to be giving their best to the creation of a new generation of research workers and technical experts, by example and precept, while at the same time maintaining contact with industrial and scientific problems, will be segregated for the purpose of satisfying immediate needs in what a short-sighted policy may regard as a practical manner.

It can be readily understood that the temptation to a scientific man to enter upon a career in which he will be able to give the whole of his time to research, particularly when accompanied by financial inducements, is very difficult to resist. For this reason the Government and other authorities, while maintaining their new and more enlightened attitude towards scientific and industrial research, should guard against the danger which has just been clearly pointed out, first by making it a *sine qua non* that the universities should retain first-class scientific and technical men on their staffs, and secondly by encouraging these men to combine as far as possible the double duty of investigating the problems which

press upon them in the present and of training the larger numbers of students who will be required to meet the inevitable demands of the future. This matter is of too far-reaching importance and of too comprehensive a character to be treated adequately at the end of an article on a rather different subject, but as it has been so far apparently altogether overlooked, and as it has a direct bearing on coal conservation and all kindred problems, no apology need be made for adding this protest and suggestion.

John W. Cobb.

SHIPS AND EMPIRE

1. Seaways of the Empire. By A. J. SARGENT, M.A. A. & C. Black. 1918.
2. Ocean Trade and Shipping. By DOUGLAS OWEN. Cambridge: University Press. 1914.
3. Merchant Tonnage and the Submarine. Cd. 9221. 1918.
4. Report on Shipping and Shipbuilding Industries after the War. Cd. 9092. 1918.

FOR the first time since the Peace of Breda was signed in July, 1667, with the Dutch, we have to recognize the painful fact that we find ourselves with a gravely diminished merchant shipping at the conclusion of a war. That is the shadow which dims the splendour of our victory. What the exact figure of the reduction may have been is a question which can wait for a little. No one can deny that it is serious, nor that it increased monthly, though latterly in lower proportions to our building of new vessels.

The contrast between the respective positions of our merchant shipping as they were before and after the last war which can be compared with that which has just been concluded, and those of 1914 and to-day, is depressing. When France declared war on February 1, 1793, the Register General of Shipping showed that there were 16,079 vessels, including a few prizes made in former conflicts, then belonging to Great Britain and Ireland, the Isle of Man, the Channel Islands, and the Colonies. When peace came back in 1814 there were 24,418. Our merchant shipping did not, as is sometimes loosely said, double between 1793 and 1814, but it increased very largely. And it must be borne in mind that these figures do not include all the vessels engaged in carrying the trade of the British Empire. Those which belonged to Gibraltar, or were confined to trade within the charter of the East India Company, lay outside the purview of the Register of Shipping at home. The first was of no importance, but the second formed a substantial part of our total equipment for the transport of seaborne commerce.

A distinction must be made between ships used to carry

goods and passengers out to the East, or to bring them to London, to which all trade with India and China was confined so long as the Company retained its monopoly, and those officially described as trading in the Eastern Seas. The former were 'the Indiamen.' The Company makes a great figure in the history of commerce, and very justly, but its glory may easily blind us to what was the fact, that its trading fleet was small even when judged by the standard of the time. When 1,400-tonners which brought the tea from China, and 800-tonners which carried the rich cargoes from the Bay of Bengal, and the 500-tonners which were laden with 'gruff goods,' i.e. raw material, are taken together they were not many. In 1814 only 97 Indiamen of 71,028 tons were cleared inwards in the port of London, and 52 of 39,141 cleared outwards. As in that year our total tonnage was 2,616,965 it will be obvious to all that the proportion contributed by Indiamen was small. The vessels described as engaged in trade in Eastern Seas were those employed in the port to port, or up country, trade. They were owned by private traders, European and native, built in India, manned by Lascars under white officers, and were not allowed to trade outside the limits of the Company's charter, the Indian Ocean and Archipelago, the China Seas, and Pacific. Thus while the Indiamen proper were on the British Register, the others were not. Yet they formed a very valuable part of the shipping of the Empire, for not only did they serve a great part of His Majesty's dominions, but they were much employed in collecting or distributing the cargoes carried by the Indiamen. This part of our shipping in the years between 1793 and 1814 must not be ignored, for it enters into the comparison between then and now, when what we are dealing with is the growth or decline of tonnage. We have now no class of ships which corresponds with those which carried the internal trade inside the limits of the Company's charter. The same steamers to-day do what was done both by them and by the Indiamen.

The question how the increase between 1793–1814 was made is not easily to be answered with precision. Much of it was undoubtedly contributed by prizes. The Navigation Laws, while making it the rule that British commerce was to be carried by British-built ships, allowed of one exception.

Vessels taken from the enemy might be added to the Register. In 1792, the year before the great revolutionary war began, there were 607 prizes sailing under the British flag. By 1812 the number had increased to 3,899, a gain of 3,292. It is improbable that many additions to this list were made after that year. Without pretending to minute accuracy we may fairly presume that more than a third of the 8,339 additions made to our mercantile marine between 1793 and 1814 were prizes. The balance represents the gain by building.

Considering that the Register of Shipping was bound to make a report to Parliament of all vessels built and added to the Register from October 1st to September 30th yearly, and that these returns are included in the Session Papers, it would seem that a moderate exercise of industry ought to be enough to enable us to see how the tonnage grew from year to year. But much industry and investigation would be needed, while it is not certain that the inquiry would be rewarded by a full discovery of the truth. It is difficult to get at all the Session Papers. The collection in the British Museum is incomplete. The index to the Papers appears to show that no return was made for two years. And when those which are accessible are compared they are found to suffer from an evil incidental to statistics. It is rather startling to find that these official figures occasionally differ widely. If we take two returns, both made by the Register of Shipping, for the years from January 5, 1793, to January 5, 1805, and compare it with another which goes from 1795 to 1814 inclusive, the discrepancies are found to be enormous. To take one year for purposes of illustration. According to the earlier statement, 823 vessels were built and added to the Register in 1796. According to the later the number was 510. And there are similar differences to be noted all through. It is but fair to add that the second return contains a warning that the figures for Scotland could not be given because the documents had been burnt in the great fire of February 12, 1814, which destroyed the Custom House. But even if this notice applies to all the years it cannot possibly account for the large gap between the earlier and the later statements.

British shipping too was subject to continual attrition.

Vessels were worn out and broken up. Some were wrecked. Others were taken by various enemies. When we come to this cause of loss we are in danger of going astray among partial and contradictory testimony. Some of it is of no value. The list of over 10,000 losses by capture, and to French privateers alone, given by Mr. Norman in an appendix to his 'Corsairs of France' is worth naming only because it is the highest. If we take it for that reason only and compare it with the lowest official estimate, we find that the additions did still exceed the losses. We are on sure ground when we allow that the Register of Shipping can be trusted when it states what was the number of vessels actually on the Register in any given year. If we have too often to say with the Duke in Othello: 'There is no com-'position in these news that gives them credit,' we can console ourselves by quoting the judicious Second Senator: 'Yet 'do they all confirm a Turkish fleet and bearing up for Cyprus.'

Our merchant shipping did not double, but it did increase, and largely, in the teeth of twenty-one years of war. And so it had been wont to do in all our wars. The evidence is irresistible. We may well be disgusted by the callous indifference of a statistician of the competence of George Chalmers when, in his well-known 'Estimate of the Comparative 'Strength of Great Britain, and of the Losses of her Trade 'from every war since the Revolution,' he dismisses the loss of life as having been truly a gain to industry during the Seven Years' War. There were, he says, never so many '*industrious people*' (and he points his remark with italics) 'as after the return of peace in 1763,' for though 'the forsaken 'lover, or the restless vagrant, may look for refuge in the 'army, or the fleet, it may admit of some doubt how far the 'giving proper employment to both may not have freed 'their parishes from disquietude, and from crime.' As for the 'laborious classes,' they are 'too wealthy to covet the 'pittance of the soldier, or too independent to court the 'dangers of the sailor!' So the men who died at Quiberon, or on the Heights of Abraham, by the bullet, or of yellow fever—to the extent of about half of them—at the siege of Havannah were probably a good riddance! In the meantime trade flourished and shipping increased. The heartless balance of loss and gain is vile, but Chalmers was right when

he said that our shipping grew. No one would echo his tone now—but neither could any man tell the same tale.

What our loss of tonnage really has been is not to be gathered from the words of official gentlemen putting the best face on things in Parliament. It has been reduced not only by wreck, collision, or the action of the enemy while carrying cargoes, or going in ballast in search of a lading. Vessels taken by the Admiralty as auxiliary cruisers, boarding ships, transports, and hospitals which have perished, or have been worn out, in the service, are also a loss to merchant shipping. They will never return to the purpose for which they were built. Till we know all the facts we had best not be too ready to conclude that the balance of loss is 3,500,000 tons, nor any other figure which there is any reason to believe has been preferred because it sounds comparatively well. Yet one does not wish to be disrespectful to official statements. If officials do at times practise a certain economy of truth, they can be very instructive to such as will look at facts for themselves and have the firmness to disregard the labels. Cd. 9221, 'Merchant Shipping and the Submarine,' is a case in point. The following tables summarize the position on October 31, 1918:

		Gross Tons
World Tonnage		
Losses		15,053,786
Gains:		
New construction	10,849,527	
Enemy tonnage captured	2,392,675	13,242,202
Net Losses		1,811,584
British Tonnage		
Losses		9,031,828
Gains:		
New construction	4,342,296	
Purchase abroad	530,000	
Enemy tonnage captured	716,520	
		5,588,816
Net Losses		3,443,012

These figures can be arranged so as to show their meaning more clearly:

Gross British losses	9,031,828
Gross Foreign losses	6,021,958
British construction	4,342,296
Foreign construction	6,507,231

Foreign nations, therefore, have built rather more than they have lost, and half as much again as we have.

The day is at hand when we shall begin to be able to name the causes of, and to assign the responsibility for, this patent failure to protect an indispensable part of the national fortune. For the present it is enough to record the fact and to endeavour to estimate its significance and probable consequences in a truly critical spirit. True criticism demands that we should avoid what our fathers called croaking, and we pedantically baptize pessimism. Every one of our great wars has been followed by lamentations over the decay of national wealth, the burden of debt, the horrid prospect that the foreigner would step in to profit by our loss. Confident critics, of whom George Chalmers himself was an excellent example, had an easy task when they went about to prove that the wailings of the croakers were not justified by the evidence. And yet perhaps there is something to be said for the practice of looking at the worst. It may serve less to depress men of spirit than to animate them to effort, and it is less mischievous than the blind confidence which tempts us to rest in a fool's paradise. Chalmers and Burke, who wrote on the same theme, could quote evidence such as could not be produced by the most cheerful of commentators now. They could bring out chapter and verse to demonstrate that our shipping, our commerce, and our industry were all working on a greater scale at the end of the war than when it began. There was wont to be a temporary shrinking in the first period of hostilities, but we never failed to rally and to surpass the pre-war limit. In the war now suspended, and as we hope concluded, the course of events has been the reverse. Our loss in shipping has been heaviest in the later stages, and it has been in them that the Board of Trade reports have shown month after month a progressive fall in the value of our exports. British ships have been withdrawn from seas on which they once predominated. A whole harvest, paid for by the British Government, has been left to be eaten by vermin in Australia because there were no ships available to bring it away. And there were no ships because our tonnage was being steadily worn down. As the British flag was drawn back, others have come in to fill its place.

Whoever writes with a proper sense of responsibility will

approach this tender subject of the replacement of British shipping by that of other nationalities cautiously. He ought to be careful to abstain from making a grievance out of what is but natural. The world must be served, and when we are not at hand to do the work, we must expect to be replaced, as we have stepped into the room of former rivals in our time. But we shall be a very foolish people (which we never yet have been, let grumblers say what they may) if we do not realize what this replacement of our carriers by competitors is capable of meaning for us. In the midst of the mutual congratulations of allies and neutrals at the downfall of the once hectoring and threatening German Empire, notes of another kind are audible. We can hear the old growl that Great Britain wishes to be the bully of the seas, and is envious with the mean envy of the rich man who counts the prosperity of another as a diminution of his own superiority when she discovers that the mercantile navy of a foreigner is growing. No spirit could be more base than this, and we should deserve the worst our enemies have ever said of us if the accusation were well founded. There are apparently some among ourselves who think that the charge is not made wholly without excuse, at least if we may judge by the indignation shown when some public man speaks of the necessity of naval supremacy for the British Empire. The public man who talks in this fashion may be uttering claptrap to tickle the ears of his hearers—as public men are wont to do—or he may even be one of a body of politicians who have been imperilling the supremacy he professes to think necessary. Yet he is telling the truth. Scripture is Scripture even in the mouth of Satan.

Supremacy at sea is for the British Empire what the command of the Mississippi Valley is for the United States. Those States form a compact mass of territory which is traversed by the river; therefore they could not allow any part of it to pass under foreign control. The British Empire is spread in widely separated masses of territory over the surface of the globe. The 'Seaways' are the connecting nerves and veins which hold it together and make it one. It is a credible proposition that 'in the deeps of the years and the 'changes of things' there may arise some people which, because of the advantages of its position, its resources, and

its qualities, will be able to create a merchant shipping equal to or greater than the British, and will then produce a navy proportionate to its stake on the sea. That the only people which is likely to achieve this development is the American, that we are excellent friends and hope so to remain, are considerations irrelevant to our argument. Whenever the United States, or another nation, is our equal, and still more when it is our superior, on the sea, the British Empire will have lost its place in the world. Our rival may be moved by no animosity, may be just and friendly. None the less he will have the power to cut the connexions which hold the British Empire together. It may continue to be prosperous. Spain is richer now than when she owned the Indies. So may we be more wealthy when our supremacy is gone, but we shall no longer be the British Empire which owed its place in the world to its own strength. We shall be compelled to trust our safety to the moderation, the justice, the generosity of a rival. Supremacy we must have or we fall from our high estate.

That supremacy is not based on the fighting navy alone—nor even chiefly. The navy which is there to fight in case of need, and at all times to police the seas, is itself founded on the vital navy which trades and fishes and so makes the treasure out of which the armed force is provided. When the trading part diminishes so must the armed sea force. When the first is surpassed so will the second be. We hear of the wish of the Americans that the British Admiralty should make a reasonable proposal. There will be no excuse for wonder or complaint if Americans, with a rapidly growing merchant shipping to shield, were to say, 'We are willing 'to share with you the duty of policing the seas and keeping 'the peace. But we are great enough, rich enough, and 'sufficiently interested to justify us in sharing on equal 'terms. Therefore we in the most friendly spirit ask you 'to make your choice. Will you bring your navy down to 'a level with ours, or will you recognize how reasonable it is 'that we, who have so much at stake, should build our navy 'up to a level with yours?' When, if ever, the merchant shipping of the United States equals ours the alternative will be offered. It is in human nature and in the nature of things that it should be.

What likelihood is there that the case will arise? The past can give us little evidence here. There is no parity now between our position and that of an age in which sailing ships of 140 tons or so carried British manufactures out in exchange for raw materials, largely in markets where we enforced a monopoly not by competition but by power; when the whole of our trade with Africa was but half of that with Spain; when the trade with the West Indies was nearly equal to our commerce with the East; and when, a very important consideration indeed, no ships were sent out laden with motive power in the form of coal to be stored at meeting places of trade for the use of other ships. We must go by what exists to-day—by the conditions which are clearly and compactly stated in Mr. Sargent's 'Seaways of the Empire.'

The dominating fact of the whole body of evidence is this: that millions of tons of British shipping go, or before the war went, in ballast to two great producing markets—to the east coast of North America, and to the Indian or China Seas, in search of bulky cargoes of foods and raw materials. They paid part of their way out by carrying goods or coal to intermediate ports or coaling stations such as the Canaries or Suez. Part of their round they did in ballast. The bulky cargo which they found in their port of trade provided the profit of the voyage. Now a moment's thought ought to be enough to show the most hopeful of mankind that this course of trade not only may be, but most assuredly would be, reversed if in the regions which supply the bulky and profitable return cargoes there were to be merchant shipping other than ours at hand to begin the round of trade by carrying those foods and raw materials which have hitherto supplied the return cargoes for our vessels. They would pay their own way out by the freight of the ladings which we had hitherto taken back, and they would make their profit on their voyage home by competing in our ports for the cargoes which we have hitherto carried out. British ships in the past have worked their round of trade with profit because when they reached the regions of great production of bulky cargoes they found few or no rivals. That will no longer be the case. The British ship which goes in ballast from a coaling station, or South American port, to the east coast of North America must reckon with the competition of the tonnage of the

United States. The British ship which goes on in ballast from Suez after landing its coal, or rounds the Cape on its way to the Eastern Seas with or without a lading of coal from Durban, will find rivals in the increasingly numerous ships of Japan.

Some change in the conditions which have prevailed in seaborne commerce for the last two generations was undoubtedly inevitable. The predominance of British shipping on the scale to which we have become accustomed is comparatively recent. There was a time when the American clipper pressed us hard all the world over, and made a great figure on the Atlantic. In the years following the Napoleonic War the cost of building a wooden ship doubled in Europe. New England shipbuilders had a good supply of timber close at hand, and they drew on it recklessly. By building with a view to speed, and not as we, encouraged by our monopoly, had taken to doing with a preference for carrying capacity; by constructing economically, even lightly; by hard driving to gain time (ships were launched ready rigged and worked under a press of sail); by wearing out their clippers at a great pace during a short but profitable life—the Americans did for a time lead on the seas where their flag has of late been hardly seen. As long as they could build cheaply it paid them to 'rack,' i.e. overstrain, ships. That the clippers carried less cargo than British craft of the same nominal tonnage, and that they were worn out sooner, mattered but little so long as they could approximate to their aim, which was to make three voyages while their competitors of the old country made two, and so long as they could be cheaply replaced.

About the middle of the nineteenth century these conditions altered. We were driven to improve the models of our vessels. Iron replaced wood as the builders' chief material. The price of timber rose in America with the destruction of easily accessible forests. The steamer replaced the sailing ship. Great Britain was admirably equipped to meet the change. America was not. Therefore American clippers, once seen on every sea, vanished. Angry Americans were for a space fond of accounting for their defeat by the doings of the 'Alabama' and other Confederate cruisers. To account for a world-wide economic revolution by the depredations

of a few commerce destroyers is about as rational as to attempt to explain the Flood by the hypothesis that Noah caused it by throwing his slops out of the windows of the Ark. For half a century the American people have found it to their advantage to devote all their own capital and labour, and as much of both as they could import from Europe, to the internal development of their country, while they left the profit of transporting their exports to foreign carriers, of whom we have been by far the most important. But good observers have long foreseen that the time must come when the Americans would wish to benefit by the freight of their goods. They have the materials for building. Those materials have been made accessible, and they have a superabundance of the skill needed when the engine-room complement is so much more essential than those rather forlorn representatives of the old 'sailormen,' the deck-hands. Of them they will not fail to secure as many as they are prepared to pay for. The renowned Yankee clippers rarely carried more than one-third of native American seamen in their crews. British seamen, Scandinavians, Germans, Portuguese, and Spaniards made up the other two-thirds. Good wages drew them, and they were tempted by the fresh bread provided daily—a welcome change from rocky ship's biscuit.

The story of Japan is different, and far more wonderful. There are those still alive who can remember when the Japanese began to make their appearance among sea traders. They were as the ship's boy, who 'comes aboard as knowing 'nothing.' We see where they are to-day, and can look forward to what they will be at no distant date. So far they have been dependent on foreign supply for plates. But they are taking measures to make their own. A people which has done so much can do far more. The iron deposits of China are handy to be worked. During this war the Japanese have set themselves to quadruple their steam tonnage. Their shipowners have not been subject to an excess profits tax, and the great gains they have made have been applied to increasing their plant.

The war has not created these competitors. What it has done has been to give them an invaluable opportunity and stimulus. We do well to be on our guard against mere alarmists. All the stories which come from the United

States and Japan are not gospel. Perhaps the Americans have not already raised their sea-going tonnage from 2,500,000 to 13,000,000, including commandeered bottoms. Those other 13,000,000 which, we are assured, are contracted for and will be built, may not all become real tonnage—not even most of them. But that the States and Japan have vastly increased their shipping, and that there are economic conditions which justify their ventures—these are propositions which cannot be denied without folly. In the meantime the Scandinavians, who have ever been keen competitors for cheap freights, have been preparing to make the most of their coming opportunity. The profits of their shipowners, which have been great during the war, have been exempted from excess profits tax on condition that they were invested in more ships.

The nature of the opportunity is obvious. We end the war with a loss of 3,500,000 tons at least, as confessed by Dr. Macnamara for the Admiralty. Let us suppose, just to get as far as we can away from the alarmist attitude, that this is the real figure, though when we allow for vessels lost in warlike service, and others so worn that they will stand in need of long and thorough repair, it is probably below the truth. What this means is, that when trade begins to resume its normal course we shall find much of the seaways in the occupation of rivals, who will not be turned off them without a struggle. Every one knows how hard it is in all kinds of business to reconquer a lost connexion. The feat can be achieved only by rendering better service and by underselling. Allow, as is but just, that our shipowners will do as they have done since they were freed from the swaddling clothes—or the stuffy hot-house—provided for their 'protection' by the Navigation Laws, that is to say that they will display all possible energy and intelligence. Yet they can do but what they can do with the materials and the opportunities allowed them. However capable they are they must fail if they cannot undersell. If up to the beginning of the war Messrs. Harland & Wolff, or any other shipbuilders at Belfast or elsewhere, could turn out fine ships at a cheaper rate than foreign builders, we know (for they are ready to avow it) what was the indispensable condition of their success. They could obtain their material cheaper than could

their foreign competitors. That very German 'dumping' denounced by sentimentalists of confused brain was the main cause of their success. It ought to be a platitude, but owing to this same confused thinking of these sentimentalists it is a truth which greatly needs enforcing, that if builders have to pay higher prices for their materials they must ask more for their ships; and it ought to be another platitude that if an owner has to pay more for his ship he must receive increased freight if he is to make a profit. It ought to be a third platitude that if men are to make the best use of their wits they must be free to employ them. One would be ashamed of writing down such elementary truths if the air were not full of the clamour of muddle-headed people, and of socialist fanatics who manifestly ignore all fact and all experience.

Some part of what has been lost during the war is but too probably gone beyond recall. There is one short paragraph among the Conclusions on page 89 of the 'Depart-'mental Report on Shipping and Shipbuilding' (Cd. 9092) which makes depressing reading:

'Foreign competition was severe before the war, especially in the trades near home. In part this competition was of the ordinary commercial type, but there is reason to believe that much of the competition of German lines was due to artificial causes. After the war the competition of American, Japanese, and neutral flags—but especially of the Japanese flag—will be much accentuated.'

The Report was founded on evidence collected before the intervention of the United States, that is to say, before the Americans applied themselves to developing a huge mercantile marine. If the Committee were reporting now it would probably not apply the word 'especially' to the competition of the Japanese flag. The same authority has recorded that 'about one-half of the British shipping engaged in the ocean 'trades traded to America, which supplied nearly three-'fourths in weight of our imports from countries outside 'Europe, including the greater part of the grain imported 'into this country.'

Both continents are included, but it was the north-east coast which provided cargoes for the 2,000,000 tons of British

shipping which went to it yearly in ballast. And it is just there that the competition of the American flag is to be met. Our vessels could afford to carry 76,000,000 tons of coal, which formed just over three-fourths of the total weight of our exports, to intermediate ports, and then go on to the north coast of America because they found safe return cargoes when they got there. To carry a cargo of coal to, say, Pernambuco, or even the Canaries, and then steam back empty, would be an unprofitable trade.

Something we must in all probability resign ourselves to lose. But are we to lose more than is inevitable? And how are we to keep our losses down to the smallest possible limit? These are questions which rational men will put to themselves. Sir Leo Chiozza Money and Labour Members —or some of them—would, no doubt, reject the advice of the Departmental Committee as coming from a prejudiced quarter, and as having been given in the interest of privileged persons who flourish at the expense of 'the people.' Yet the Committee speaks for those who have done more than spin theories, or give a voice to envy, for those who have created the magnificent mercantile marine, when it declares that

'The first and fundamental condition of reconstruction is the early removal from shipping of Government operation and control. Such control is not only alien to the British genius but always tends to paralyse individual effort. Especially is this so in an industry like shipping, which is everywhere exposed to international competition and depends for success on elasticity and freedom from restrictions. Private enterprise, which has often saved the country in the past, built up the splendid mercantile marine without which this war could not have been carried on; and it is our conviction that any departure from a principle which has been of such material value to us would be a dangerous experiment and a blunder of the worst kind.'

The Committee recommend that Germany may fairly be called upon to give up its remaining merchant shipping as a penalty for the savage destruction caused by its submarines. But it adds, with obvious good sense, that we should have to share with our Allies. It is not invidious but rational to point out that whatever went to our friends would be so much added to their ability to compete with us. That it

was taken from the Germans would not affect the fact that it would compete with us though under the ' Stars and Stripes ' or the ' Sun in Glory.' Whatever palliatives we can find, and we are entitled to take all we can, our own efforts must make good. And that they may make good they must be left in freedom—in freedom to obtain their materials where they can best be found; to work them up in the most practical forms and to use them to the best purpose.

The alternative offered by the Protectionist and the Socialist —two kindred spirits—is commended to us under various fine names. Every one of them is just a cover for control by governmental officials. The Protectionist method was tried under the Navigation Laws—and condemned by the results. The Socialist proposal advocated by our friends the Labour candidates is made in general terms, but we know what the attempt to carry it out must imply. Existing ships might be taken over and the enormously complicated work of competing for cargoes in British and foreign ports begun by the officials. When the owners had been dispossessed, ships would in future have to be designed and built for every trade by the same officials. It would of course be necessary to give the officials power to control the shippers of cargoes, our own and foreigners alike. If they were left free they might, and most probably would, prefer to deal with carriers who would be less able to dictate to them. The Socialist masters of Great Britain, for we presume the self-governing colonies must be left to decide for themselves, would be empowered to make bargains and arrange contracts as between two independent foreigners whenever a British ship was to carry cargo from one to the other. The British Government would stand behind every agent and every skipper in foreign ports, not to protect them against wrong, but as business employer. This method of conducting shipping business would, it must be admitted, be singularly efficient for one form of production—the production of international disputes.

David Hannay.

THE FRONTIERS OF BELGIUM

1. **A Short History of Belgium** By LEON VAN DER ESSEN. Chicago University Press.
2. **La Barrière Belge.** By PIERRE NOTHOMB. Paris: Perrin.
3. **Histoire Belge du Grand Duché de Luxembourg.** By PIERRE NOTHOMB. Paris: Perrin.
4. **La Volonté Nationale Belge.** By F. VAN LANGENHOVE.
5. **Les Traités de 1831 et de 1839.** By MM. TRÉVIRE et NERVIEN. Brussels and Paris: Van Oest.

THE origins of Belgian nationality can be traced as far back as the Roman conquest, but it was only in the fifteenth century, under the rule of the Dukes of Burgundy, that the Low Countries assumed the characteristics of a centralized State. They included all territories from the Zuyderzee to the Somme, and from the sea to an irregular line running between the Meuse and the Rhine. In the course of the following centuries, under Spanish and Austrian rule, this area was considerably reduced by the loss of the northern provinces which went to form the independent Dutch State, and of Artois, Cambresis, and Western Flanders which were conquered by France. If however we compare the map of the Belgian provinces under French rule in 1814, on the eve of the Vienna Congress, with that of modern Belgium a century later, on the eve of the Great War, we notice that several changes have occurred. Belgium in the interval had lost half of Luxemburg, several districts on her eastern border between the Moselle and the Meuse, half of Limburg including Maestricht, and the left bank of the Scheldt estuary.

In order to understand how these changes took place it is necessary to examine briefly some details of the negotiations which brought about the conclusion of the treaties of Vienna (1814-1815) and the various treaties from 1830 to 1839 which determined Belgium's present territorial status. These are not sufficiently known in England. Most Englishmen are under the impression that German ambitions are of recent date, and that the invasion of Belgium in 1914 was the first ordeal imposed on the patriotism of the Belgian people since

their liberation. When peace conditions are about to be discussed and the map of Europe is under complete revision it may be useful to show that Belgium paid heavily for her independence, and that the treaty of 1839 was only signed in Brussels under the threat of Prussian military intervention.

In June, 1814, the kingdom of the Netherlands was created and placed under the crown of Orange-Nassau by European diplomats anxious to place a neutral buffer State in the way of French ambitions. The kingdom comprised the region now divided between Holland, Belgium, and Luxemburg. The negotiations which followed go far to show that Prussia had been pursuing a policy of her own and intended to keep in her grasp the fortress of Luxemburg and to obtain easy access to Liège and the line of the Meuse.*

On May 31st, 1815, the province of Luxemburg was taken from the kingdom of the Netherlands, but given back to the king personally as a German Grand Dukedom 'in exchange 'for his German possessions,' the fortress of Luxemburg remaining in the hands of the German Confederation which possessed the right of keeping a garrison there. From the German point of view this arrangement presented a twofold advantage: Luxemburg became a German Grand Duchy and consequently part of the German Confederation, while the principalities of Nassau-Dillenburg, Siegen, Hadamar, and Dietz definitely passed to Germany. King William however never ceased to consider Luxemburg as a Belgian province of the Low Countries. In the same year 1815, before the Commission which had been charged to revise the fundamental law of the new State, the King declared that 'the Grand Duchy 'of Luxemburg would be considered as an integral part of

* The following extract from 'The Diary of Frances, Lady Shelley' (1787-1817) under the year 1815 is interesting: 'On our return to Brussels we were much disappointed at hearing that the Duke of Wellington would not be able to attend the Inauguration of the King, which had been for some time arranged for September 21st. We were told the reason as a profound secret. It appears that the Prussians were determined to possess the Luxembourg territory; and that there was no one but the Duke who would dare to oppose them. The Duke has been entirely successful in that matter. Luxembourg has been by treaty annexed to the Netherlands.'

'the State so far as popular representation and legislative 'institutions are concerned.' Several Belgian districts were even added to the Grand Dukedom and formed with it one province, which sent four deputies to the Chamber who shared all the rights and duties of their colleagues. It was only later, after the separation of 1830, that the Belgians realized the importance of the change.

The treaties of 1815, however, gave Prussia some substantial and more immediate advantages on the eastern frontier of the new kingdom. By her unceasing demands she succeeded in straightening the irregular line running between the Meuse and the Rhine, and in tearing from Luxemburg, from Liège and Limburg a series of small towns and villages whose population amounted to several hundred thousand persons. The villages on the right bank of the Moselle, such as Nenig, Roelig, Viltingen, etc. (63,000 inhabitants) first allotted to Austria in 1815, were taken over by Prussia in 1816. In April, 1815, all the territories on the left bank of the Sure and of its tributary, the Our, with Neuerburg, Bitburg, and Dasburg (43,000 inhabitants), were arbitrarily annexed. The same fate was shared by the small towns of St. Vith and Malmédy whose population was—and has remained since—almost entirely Walloon. Eupen (10,000 inhabitants) and, further north, Rolduc (now Herzogenraid) were at the same time taken from Limburg, and Nederchruchten from Guelder.

It is interesting to notice that the great military camp of Elsenborn and the strategic railways built by Germany shortly before the war are all situated in this borderland. By readjusting the frontier of the Low Countries, the treaties of 1814, 1815, 1816 left the new kingdom practically defenceless against any aggression coming from the east. The high ground between the Meuse and the Rhine which forms the natural defence of Liège was already in the hands of the enemy.

The union of Belgium and Holland, accomplished by the Vienna Congress at the expense of the southern provinces, was bound to cause friction. It was concluded without any regard for historical traditions or for the wishes of the people concerned. The Belgian revolution of 1830 might have been prophesied by any far-sighted statesman. It was a natural reaction against an artificial arrangement which no doubt suited the Great Powers after the Napoleonic wars but did

not suit the Belgians and the Dutch whose connexions with one another had been broken for three centuries.

When the King of the Netherlands found his troops expelled from his southern provinces he appealed to the nations who had signed the eight articles creating the kingdom of the Netherlands—Austria, Great Britain, Prussia, and Russia—asking for military intervention and suggesting that they should act in co-operation with France. Lord Aberdeen answered that the independence of the Belgians was now an accomplished fact, but that a Conference would be held in London in order to mediate between the two parties. The first sitting took place at the Foreign Office on November 14th, 1830, and the conditions of an armistice were drawn up forthwith. The troops of the belligerents were to be withdrawn on both sides of the boundary which separated the two groups of provinces on May 30th, 1814.

The date is important. The small territories now known as Dutch Flanders had formed an integral part of the Belgian provinces from 1795, when they were annexed by France, to July 20th, 1814, when they were attached to Zeeland by a Dutch decree. The Conference, by selecting the date May 30th, 1814, recognized the right of the Belgians to the left bank of the Scheldt estuary. Military occupation was however refused to the Belgians. The Conference, accepting this rebuff, on January 20th, 1831, altered the date from 1814 to 1790, that is to say, five years before Dutch Flanders was annexed to Belgium, thus barring Belgium's claim.

The provisional government set up in Brussels only agreed to this under protest, and after receiving the promise that the Scheldt would remain absolutely free—a promise which was only partly redeemed. This however was not the main objection of the Belgians to the action of the Powers. From the first they made important reservations with regard to the very principle of external interference. They accepted it gratefully as long as it was only 'prompted by feelings of 'sympathy for the sufferings of Belgium' and by humanitarian motives, but refused energetically 'to bind themselves by 'any engagement.' They considered the part played by the Conference as that of a mediator, not of an arbitrator. As soon as pressure was exerted upon them, they declared, through the diplomatic committee of the Congress, that they

would not 'abdicate the right which belongs to every nation 'to uphold by the strength of arms the justice of her cause.' Answering the protocol of December 20th, when the principle of Belgian independence was at last definitely recognized, the provisional government declared that

'The balance of power in Europe can still be ensured, and a general peace maintained by making Belgium independent, strong, and happy. If Belgium were to be left without strength and happiness, the new arrangement would be threatened with the same fate as that of the political combination of 1815. Independent Belgium has her share of European duties to fulfil, but it would be difficult to conceive what obligations could be imposed upon her by treaties in the conclusion of which she had no voice.'

Quite apart from the prophetic tone of the last sentence it is interesting to notice the opposition which never ceased to exist, throughout the negotiations, between the point of view of the Powers and that of the Belgian representatives. The former considered the Belgians as rebels to whom concessions might be made, considering the circumstances, and who ought to be only too happy to buy their independence at any price. The latter, taking such independence for granted, were ready to listen to advice, but refused to accept any interference from abroad opposed to the wish of the people and the sovereign right of the nation.

As early as November, 1830, Russia proposed to use force to compel the Belgians to submit. Each time the relations became strained between the Belgian delegates and the Conference the same argument was used. In the light of recent events, this long struggle between a small and defenceless people and the representatives of the greatest military Powers of Europe assumes a tragic and solemn character. We are now better able to understand the obstinate resistance of the founders of Belgian independence to an arrangement which imposed upon them overwhelming duties without giving them the power to fulfil them. They seem again and again to foresee the trial which the future held in store for their children. They were not merely fighting for themselves: they were fighting to avoid a tragedy, and, if they had been listened to, this tragedy might have been avoided.

The story of the negotiations can be roughly divided into

three chapters. The first includes a series of conditions laid down by the London conference in December, 1830, and January, 1831, known as 'Bases de Séparation.' These conditions, accepted by the King of the Netherlands, were refused by the Belgian Congress. The second tells of the negotiations which brought about, during the five following months, the revision of these first proposals in favour of Belgium, and the drafting of the 'Préliminaires de Paix' or 'Treaty of the Eighteen Articles.' These new conditions, accepted by the Congress in July, were rejected by the King of the Netherlands whose dominions had been reduced to Holland alone. Breaking the armistice King William waged war against Belgium. The third chapter includes the new edition of the preliminaries of peace set forth by the Conference in November after British and French naval and military intervention. This November version of the peace preliminaries was known as the 'Treaty of the Twenty-four Articles.' It involved the disappearance of the most important concessions previously obtained by the Belgians. It was, however, at first rejected by the Dutch king, who only gave his consent seven years later, when the Belgian Congress was at last obliged to submit to the conditions imposed by the Great Powers.

Throughout these negotiations for the separation of Belgium from Holland the most important questions under consideration were the division of the debt, the problem of neutrality, the ownership of Luxemburg and Limburg and the control of the Scheldt. The first is no longer of interest; the second was sufficiently illustrated at the beginning of the Great War. We will therefore limit our attention to the purely territorial problems.

According to the proposals put forward in January, 1831, Belgium's northern frontier was to follow the line which had separated the two countries in 1790, giving consequently the left bank of the lower Scheldt to Holland. It was proposed to apply to this stream the principle laid down by the Congress of Vienna, namely, that where a river flows through different States navigation upon it for commercial purposes should remain entirely free. This clause however provoked far less interest on the part of the Belgians than the one dealing with Luxemburg. We have seen above how this province, though nominally converted in 1815 into a Grand Dukedom

attached to the German Confederation, had remained in fact a Belgian province. It had shared the life of Belgium since the early Middle Ages. Article two of the Basis of Separation nevertheless declared that Belgium should include all the southern provinces which had formed part of the Netherlands in 1815 with the exception of Luxemburg which, being in the possession of the House of Orange-Nassau, 'will continue 'to belong to the German Confederation.' As long as Belgium and Holland and Luxemburg were all under one ruler the Belgians had not realized the importance of the change brought about in 1815 by Prussian diplomacy. The decision of the Conference was all the more surprising to them that the Luxemburgers had played an active part in the 1830 revolution, and sent to the Congress some of its most active members. One of them, M. Nothomb, remarked that 'national 'sovereignty was transferred from Brussels to the Foreign 'Office.' By an overwhelming majority (169 against 9) the Congress protested against any delimitation of Belgian territory, 'without the consent of the representatives of the 'nation.'

Meanwhile Holland, in spite of the armistice, maintained the blockade of Antwerp. As a reprisal, the Belgians continued to operate in front of Maestricht, notwithstanding the injunctions and threats of the Conference. On January 18th, the representatives of the Conference in Brussels received instructions to warn the Belgian Government that, in case of non-compliance with the wishes of the Powers, the coast would be blockaded and sterner measures taken if need be. A month later Talleyrand, the French delegate at the Conference, wrote to the Minister for Foreign Affairs in Paris that, since communications with Maestricht had not been restored, strong measures would immediately be taken. Yet not only did the Belgians maintain their attitude but when, on March 5th, the King of Holland addressed a proclamation to the Luxemburgers, promising them an amnesty, the Belgian Regent answered publicly advising them to reject these offers and to trust the Belgian Government. 'In the name of Belgium,' he wrote, 'be sure that your brothers will never abandon 'you.' This proclamation incensed Prussia, whose 'rights' over Luxemburg were thus challenged. Invasion was openly threatened.

The long-drawn struggle was thus brought to its climax. On April 17th, 1831, the Conference launched its ultimatum. If Belgium did not accept the Basis of Separation and renounce all claim to Luxemburg, the representatives of the Powers would leave Brussels forthwith, and the Belgian troops would be compelled by force of arms to evacuate the ' Dutch districts ' they occupied. The Belgian Government remained unshaken. A new note was sent fixing June 1st as the last date on which the Belgian answer would be received, and stating that, after this date, all diplomatic relations would cease and the ' German ' Confederation would be free to intervene in Luxemburg.' Instead of submitting, the Belgian Congress voted, on June 4th, a decree authorizing the Government to reopen negotiations in order to bring about the settlement of territorial questions by the means of sacrifices in money. On the 6th, Lord Ponsonby and General Belliard were formally recalled from Brussels, but the discussions which were taking place between the Powers concerning the methods of common military action gave the Belgian delegates some time to negotiate with the Conference, and on June 26th, nearly a month after the date fixed by the ultimatum, an agreement was reached and the preliminaries of peace were signed in London. The most important demands of Belgium had been granted. In exchange for an indemnity, Luxemburg and Maestricht were to remain in Belgian hands, and negotiations on these issues were to be conducted directly between Holland and Belgium.

It would be an error to attribute this achievement only to the energy and talent of the Belgian delegates. They were helped in their arduous task first by the wisdom and statesmanship of Lord Palmerston and, to a lesser degree, by the conflicting opinions existing among the Powers. While Prussia was only too eager to show the mailed fist, England and France were anxious to avoid any military action which might have degenerated into a new European conflict. At the same time, when we compare not only the conditions set forth in the treaties but the tone of the documents and the terms in which they were couched, we are struck by the sudden change brought about during these few weeks. The Belgians are no longer treated as rebels obliged to submit to the will of the Powers. They are considered as a free people entitled

to treat on a footing of perfect equality with their former king. The articles of the new treaty are no longer 'irrevocable,' but merely embody a series of proposals 'which will 'be considered as non-existent if rejected by the Belgian 'Congress.'

Witness then these delegates, noblemen and bourgeois, landlords and lawyers, de Mérode, Van de Weyer, Vilain XIV., Devaux, and Nothomb, to quote only the most prominent, witness them in London mixing in the most brilliant gatherings, received by Prince Leopold, Lord Palmerston, Talleyrand. They found themselves, in their humble frock-coats and high neckties, surrounded with glittering uniforms. They had to deal with the first diplomats of Europe, honey-tongued Talleyrand, wary Palmerston. They had no power but the justice of their cause, they represented a people without diplomatic traditions, without efficient armies, whose right to independence was still discussed. They had few sympathizers, many jealous neighbours, many powerful enemies. And while Talleyrand, from his sick-bed, tried to lure them into submission, they could hear the rattle of the German sword and scent the ominous threat of partition. Talleyrand himself in his 'Mémoires' frankly alluded to partition as a pet scheme of his own: 'After exhausting all means 'of persuasion, after gathering so little fruit from so much 'worry, I believe that we shall have to come back to the idea, 'which lies close to my heart, of bringing about a division 'of Belgium in which France would no doubt find a suitable 'share.'

In spite of all these dangers and difficulties, the Belgian delegates remained immovable, obstinately putting forward the same demands, obstinately refusing all compromise. A first deputation had arrived in London in April, 1831, to offer the crown to Prince Leopold. 'M. de Mérode told me,' wrote Talleyrand on the 29th, 'that his compatriots and him-'self could not, for reasons of conscience, abandon the inhabi-'tants of the Grand Duchy who had associated themselves 'to their cause and had shared their risks.' National honour forbade any compromise in 1831, as it did in 1914. This attitude was perfectly understood by Lord Palmerston, who on May 25th wrote to Lord Granville: 'Everybody says 'that the Belgians are mad, and that it is useless to discuss

'with them. I have noticed that there is a good deal of 'method in their madness.'

Prince Leopold had refused to accept the crown before the territorial question was settled. A new deputation arrived on June 8th, including the two commissaries of the Minister for Foreign Affairs, Devaux and Nothomb. The question of indemnity was raised and some progress was made—much too slow to please Talleyrand, who became more and more impatient and irritable: 'At that time (June 21st, 1831), 'I fell seriously ill partly owing to the labour caused by the 'reticence of the Belgian commissaries. I was obliged to 'stay in bed for several days.' On the 24th he writes: 'We 'have been in conference for forty hours, but the Belgian 'delegates are so little accustomed to this kind of negotiation, 'they create so many difficulties, that we cannot get on, and 'I am tired out. A Conference took place to-day at Prince 'Leopold's; it lasted until eight. It will continue at my house 'and will last probably till late in the night. . . .' On the morrow, the Eighteen Articles were signed.

Judging by the results the 'ill-prepared' Belgians seem to have got the better of the wily French diplomat. They literally tired him out. Surely, there was some method in their madness, the same method that served Burgomaster Max so well in his negotiations with the conquerors of Brussels, and was used by Cardinal Mercier during his correspondence with Governor von Bissing concerning the deportations. Such an attitude may have seemed presumptuous ninety years ago. It no longer appears presumptuous to-day.

As soon as the new treaty was signed, Prince Leopold accepted the crown of Belgium. On July 9th, 1831, after some resistance from the 'die-hards,' the Eighteen Articles were accepted by the Congress, and the diplomats were congratulating themselves on their success. Three days later the King of Holland rejected the Conference's proposals, and urged that the Basis of Separation should be enforced on the reluctant Belgians. We cannot here examine closely the reasons which prompted his decision. Subsequent events proved that he had made adequate military preparations while discussions were going on in London, and it seems evident that he was encouraged in his resistance by the Prussians. Not being able to interfere themselves, as

they had threatened to do two months before, they now promised their support to King William if he would act in their place. On August 2nd, the Dutch armies broke the armistice. Great Britain replied by sending a squadron to the coast and a French army crossed the southern frontier. The Dutch forces were obliged to retreat.

The King of Holland had broken the law, but the Belgians had been defeated and had to put their fate in the hands of the Powers. Within a few days, all the advantages so painfully won by the Belgian delegates in London had been lost, and Prussia was again able to exert her influence in the Conference. The treaty of the Twenty-four Articles drafted during the following weeks, while preserving Belgium's political status as regards independence and neutrality, maintained the territorial settlement proposed in the Basis of Separation. Belgium, it is true, retained half of Luxemburg, but she was obliged to give up, 'as compensation,' half of Limburg, including Maestricht, though the greater part of this province had been allotted to her by the two previous treaties. This time the Belgians had not been consulted, and it was made clear to them that the arbitrary decisions were not to be considered as 'proposals' to be adopted or rejected, but as a 'final and irrevocable decision of the Powers.' The Conference dictated the law and the Belgians had nothing to do but to submit. The Powers were 'firmly determined 'to stop, by all available means, the resumption of hostilities 'which would threaten Europe with a general war.'

On November 14th, 1831, King Leopold adhered under protest to the 'hard and onerous conditions imposed upon 'Belgium,' but the King of Holland was not yet satisfied. He wanted the whole of Luxemburg; he denied the Belgians any rights on the Scheldt. For seven years the 'status quo' was maintained in Luxemburg and Limburg, both provinces, according to the formal wish of their people, remaining under Belgian rule. The bonds of friendship established during these years were so close that when, in 1838, King William at last declared himself ready to sign the treaty, Belgian public opinion was deeply stirred and desperate efforts were made to reopen the territorial question.

The Chamber and the Senate sent urgent addresses to the king, numerous petitions came from the threatened provinces

which sent delegations to Brussels. On November 13th, 1838, at the opening of parliament, the firm attitude of Leopold I. provoked wild enthusiasm. But already, in October, Lord Palmerston had declared that if the Belgians created difficulties Great Britain could not prevent the German Confederation or the King of Holland from annexing the sacrificed districts by force. The Belgian Government sent the Comte de Mérode to London and M. de Gerlache to Paris to plead their cause. These delegates urged that the long delay and the change of circumstances had given Belgium the right to claim a revision of the Twenty-four Articles which had been signed on the morrow of a military defeat. Their prompt execution had been formally guaranteed by the Powers, yet the King of Holland had been allowed to threaten a resumption of hostilities and to speculate on time. Surely European diplomacy might once more take the rights of Belgium into consideration as had been done in the Preliminaries of Peace. The last effort was made, on February 1st, 1839, by the Belgian minister in London. M. Van de Weyer suggested that Luxemburg should be militarily separated from Belgium, and that the Confederation should retain the right to keep a small garrison there. But the decision of the Powers had been taken. The Belgian question was much too dangerous to be reopened. What was half of Luxemburg compared with the peace of Europe? Prussia was allowed to have her way and to reap the fruit of the policy pursued by her in 1815. Luxemburg, detached from Belgium, opened the gate of France, and the annexation of the right bank of the Meuse by Holland deprived Belgium of her only line of natural defence. In 1839 as in 1815 the attention of Prussia was centred on Luxemburg and Liège, the two very first towns she entered in August, 1914.

Meanwhile in Belgium public opinion became more and more restless. Three ministers, de Mérode among them, had resigned to avoid the painful ordeal which was facing the Government. The Polish general Skerzynecki had been placed at the head of the army. On February 6th, 1839, the Austrian and Prussian chargés d'affaires left Brussels. Several Prussian army corps were massed along the eastern frontier. Under this threat of invasion, but this time without the support of Great Britain and France, the Chamber sat

for a month passionately discussing the great issues at stake. The deputies had before them the alternative either of preserving the independence of the country by losing the two provinces, or of losing this independence so dearly bought and saving their pride.

There was scarcely any room for discussion. A dismembered Belgium was better than no Belgium at all. But public opinion was so much excited and the patriotic conscience so deeply wounded that this decision was only reached after fierce and long debate. The ministers were at first accused of perfidy. 'You are willing to propose to deliver our brothers to the 'enemy,' cried one deputy, 'brothers who are Belgians and 'have the right to remain Belgians!' 'Some cowards have 'advised submission,' exclaimed another, 'but you will not 'give up the flag of life on which is written Union and Strength, 'for the flag of death on which is written: *Hodie mihi, cras 'tibi.*' The deputies of the threatened provinces were the most emphatic in their protests. 'Suicide will follow fratri-'cide,' cried a representative of Maestricht, while the deputy of Ruremonde urged armed resistance. 'I would rather give 'my life a thousand times,' protested a Luxemburger, 'than 'a vote which would oppress my conscience until my last 'day.' On March 12th, M. Metz, who was unable to walk through illness, was carried to his seat and declared that 'neither the King, nor the Conference, nor the Government, 'nor the Chambers, has the right to dispose of my life by 'a sacrilegious treaty which takes away four hundred thousand 'Belgians from the country of their choice and covers Belgium 'with eternal shame.' De Mérode, who knew only too well the insuperable obstacles in the way, foresaw the German danger: 'Beside Prussia will be placed a fragment of Limburg, 'a small Luxemburg governed by a small Grand Duke and 'a mutilated Belgium. This is the magnificent result of 'hundreds of protocols arranged at the Foreign Office.' M. Nothomb, one of the three ministers left to face the storm, defended with energy the Government's attitude: 'We 'have not yet had the opportunity of rendering any service 'to Europe. She has no reason to be grateful to us. If it 'were not for our pressing need of independence, nothing up 'to now justifies our existence. What matter to her our

'national soul tempered by age-long traditions! If we resist 'she will put an end to our existence as a free State with a 'stroke of the pen.' In bending before the inevitable Belgium would save her nationality, spare the disputed districts the horrors of war, and make a sacrifice which Europe would be obliged to take into account 'on the day when, bearing 'no responsibility for the outbreak of war, the country will 'be able to claim her revenge.'

Some deputies rallied around the Government through a scruple of conscience. Though it had been made clear that the Twenty-four Articles were subject to revision like previous treaties, they were unwilling to see Belgium, even apparently, deny the signature she had given in 1831. 'I believe,' said one of them 'that international treaties have a real value, 'that they are not merely scraps of paper. I believe that 'Right more than Force governs the affairs of this world, 'and that, in the end, it pays to fulfil one's obligations, however 'painful these may be.'

The opposition was still very strong. On March 14th, the Chamber listened to a remarkable speech by M. Bekaert-Baekelandt, deputy from Courtrai. At first opposed to the Government, he had been gradually convinced by the arguments of those who advised submission. This conversion to the inevitable and hateful decision had broken his heart. He ended his confession by alluding to the day when the deputies from Limburg and Luxemburg would again sit in the Belgian Chamber. 'Meanwhile,' he said, 'they will remain Belgians 'like ourselves, and they will be generous enough to consider 'that our votes are extorted by force, that they are a painful 'sacrifice imposed upon us by foreign nations. They will 'no doubt appreciate how powerless we are to avoid this 'sad obligation. . . .' He did not proceed further and fell senseless.

This tragic death brought the two parties closer together. The opposition realized that if the Government yielded to the Powers it was not through lack of patriotism, but simply because they were absolutely convinced that further resistance could only bring about a worse humiliation. The deputies from Luxemburg and Limburg were among the last to surrender. 'No, no,' cried a voice when the votes were being taken, 'three hundred and eighty thousand times no

'for the three hundred and eighty thousand Belgians that you 'are sacrificing to-day.'

In notifying to the Conference his final adhesion, King Leopold showed how deeply he felt the humiliation inflicted upon Belgium: 'His Majesty owed a last effort to the 'population who had given him so many proofs of affection 'and devotion. If he renounced them it was less for the 'dangers which threatened the whole of Belgium than for the 'misfortunes which would overwhelm the provinces of Limburg 'and Luxemburg. Never before did his Majesty realize 'more bitterly the extent of the task he had accepted in the 'interest of general peace. . . .'

The reader will draw his own conclusions. A glance at the map will show him that the gradual weakening of Belgium, first at the Vienna Congress, then at the London Conference, was to the direct benefit of Prussia. The rapid sketch which we have drawn above of these laborious negotiations reveals again and again the influence of the German Diet, and Prussian uniforms loom on the horizon whenever the proud resistance of the Belgians succeeds in checking the diplomatic action of Germany. Now that this threat is at last removed, the free nations of the world will no doubt endeavour, during the forthcoming Peace Conference, to restore Belgium not only to her former independence but also to her former strength. To quote M. Nothomb's words, Belgium has had the opportunity of rendering some 'service to Europe.' A war has come for which she certainly bore 'no responsibility,' and she may therefore now with confidence claim if not her 'revenge' at least her full rights.

Émile Cammaerts.

THE UKRAINE

'It will be the end of Russia, not indeed by any means as a great Power but as a European danger, if the Ukraine ever secedes from the Empire. . . . It matters comparatively little to Russia, if she loses Poland, and even Finland. But without the Ukraine Russia becomes an Asiatic Power.'—Bedwin Sands, 'The Ukraine.' London. 1914.

WHEN the collapse of the Tsar's Government in 1917 brought the National movements of the subject peoples suddenly to the surface, the Ukranians were not, like the Poles or the Finns, inspired by the recollection of an independence recently enjoyed. For more than two and a half centuries they had been ruled by the Tsar. Before that they had been under the Polish yoke. Those measures of Russification which, imposed at the beginning of the twentieth century, were so bitterly resented in Finland, had been introduced without protest in Ukraine at the end of the eighteenth century. And when under the influence of nineteenth century nationalism a Ukranian movement made its first appearance, it had been immediately suppressed by the Russian Government. From 1876 to 1905 (though not without mitigations from time to time in practice) and again from 1914 to 1917 it was forbidden to publish a book, or to import a book, or to produce a play, or to deliver a lecture, or to preach a sermon, in the Ukranian language. All education from the village school to the university was in Russian. A large part, perhaps the majority, of the educated classes rarely spoke a word of Ukranian except to servants or peasants. The higher strata of society, the functionaries, the military, the nobility, the superior clergy, were almost entirely denationalized. So to a great extent were the lower strata in the towns. And even in the villages, where the Ukranian language was universal, the so-called 'village aristocracy,' time-expired non-commissioned officers, village officials and former town-workers come back to their Communes, constituted a more or less Russianized element. The majority of peasants understood a Russian speaker—when they wished to—well enough: for though many never

went to school, and more forgot what they learnt in the two years of schooling which was all that most peasants got, yet most learnt again what they had forgotten during their service in the army.

Perhaps the most striking evidence of the immaturity of the Ukranian movement in Russia is the fact that in the year 1905, when all the non-Russian nations were in clamorous revolt, scarcely a voice was raised in the Ukraine in favour of separation. The chief news that reached the world from the Ukraine was of *pogroms* organized by ultra-Russian patriots in the Ukranian towns of Kiev, Kishinev, and Odessa. There was a Ukranian Club of some forty members in the First and Second Dumas. But from the Third and Fourth Dumas under Stolypin's manipulation of the franchise they had all disappeared : and at the outbreak of the war the Ukranian Nationalists had not a single representative either in the Duma or in any one of the Ukranian *zemstva*. So effectually, it seemed, had the Plan-Slav influences which dominated Russian policy in the decade before the war succeeded in the crushing of the Ukranian movement.

Perhaps they would have succeeded altogether—for the factors in their favour, as has been indicated, were many—but for the fragment of the Ukranian race, three millions only out of thirty millions, who live on Austrian soil. Here they are called Ruthenes : they inhabit the eastern parts of Galicia, of which province they constitute slightly less than half the population, and are under the yoke of the Polish majority, to whose mercies Vienna handed them over when she made her peace with the Poles after the disasters of 1866. It may be said at once that there is no group, or fraction of a group, of Ruthenes, which does not cherish for the Poles a hatred so fierce that by the side of it the bitterest protest of the Russian Ukranians against Russian rule appears tame and insignificant. At a word from Vienna the peasants would be any day ready to bring in cartloads of the heads of the Polish landlords, as they did in the Galician rising of 1846 ; and the *intelligentsia* would organize pilgrimages to the houses of the murderers, as they did when Miroslav Siczynsky murdered the Polish governor of Galicia in 1908. But neither peasants nor *intelligentsia* get the opportunity ; for no one has ever charged the Poles with weakness in their rule of subject races.

Nevertheless, though held in bondage themselves in Galicia, the Ruthenes have provided a kind of ' intellectual Piedmont ' for the Ukranian movement. The books, which were not allowed to be published in Russia, were published in Lemberg and Czernowitz and smuggled across the border ; exiles from Russian Ukraine found a home in Galicia ; and the history of the Ukranian movement down to 1914 is to all intents and purposes the history of the Ruthenes. Yet the Ruthenes are cut off from the Russian Ukranians, not only by the political barrier, but by one of those barriers which in this part of Eastern Europe count for more than political boundaries, a difference of faith. The Russian Ukranians are Orthodox, members of the Russian Church. The Ruthenes are Uniates, Catholics in communion with Rome but retaining the Greek rite and the married clergy. The Ruthene peasant is passionately attached to his rite, and very much more afraid of Latinization on the part of the Poles than of proselytizing efforts on the part of Orthodox Russia. ' Purifying the Greek ' rite ' (by which is meant the elimination of organs, vernacular hymns, and the more modern Catholic devotions, such as the Sacred Heart or even the Immaculate Conception) has always been a good political cry in East Galicia, especially among the Russophil elements : and in the hands of agitators from Russia has more than once been the prelude to whole villages going over to Orthodoxy.

One of the outstanding personalities of Eastern Europe is the Uniate Metropolitan, Mgr. Count Szeptycki. He is a Pole by birth, or rather he is a member of one of those aristocratic families which bear Ruthene names, but which were all Polonized centuries ago. A Szeptycki was Archbishop of Lemberg at the end of the eighteenth century ; but the present Metropolitan, Andrew Szeptycki, is the first of his name, and indeed the first of his caste, to acknowledge Ruthene nationality. He occupies a unique position in the National movement, and his place, when he dies, will be difficult to fill. Physically he is something of a Hercules, well over six feet high, with a big, fair beard, and with a certain air of command, in which the Polish aristocrat and the Prince of the Church are curiously commingled. He dominates almost without question an anything but docile *intelligentsia.* There is a strong vein of anti-clericalism in the

intelligentsia; and again and again the clergy have chafed under anti-clerical diatribes of the nationalist newspapers, and the diplomacy of the Archbishop has had to be put in motion behind the scenes. But by one means or another he has succeeded in shepherding into one fold the bulk of the clergy on the one hand and the principal groups of the *intelligentsia*, the so-called 'Consolidation,' on the other. This union has powerfully promoted the progress of the Nationalist movement. In the 'nineties the Nationalists managed to exclude the Russophils altogether both from the Austrian Reichsrat and from the Galician Diet. In recent years the Russophils, supported by the Poles, regained a little ground. At the outset of the war they held two seats in the Reichsrat to the Nationalists' twenty-three. Between them the Nationalists and Russophils poll all the Ruthene votes; for in the almost complete absence of a Ruthene urban proletariat Socialism is weak in Eastern Galicia, and does not play a prominent rôle.

There was a time when the Russophils—then known as Old Ruthenes—were supported by the Austrian Government as a useful Conservative body, well adapted to form a counterpoise to the Poles. Russophilism in those days was more literary than political, and Russian agents from Russia played little part in it. It decayed with the rise of Nationalism, and Vienna transferred its favours to the Nationalists. In the twentieth century Pan-Slavism, then at the flood in Russia, began to cast its foam across the Austrian border; and a vigorous politico-ecclesiastical propaganda under a Russian Pan-Slavist, Count Vladimir Bobrinsky, was set on foot. To this propaganda the Russophils, or a good part of them, rallied. The propaganda was avowedly irredentist in character: the Mission of Sovereign Russia (*Gosudarstvennaya Rusj*) to Russia in Bondage (*Poydaremnaya Rusj*) was openly preached; and conversion to Orthodoxy was to be the first step. The Orthodox seminaries of Volhynia and Podolia opened their doors to the sons of the Ruthene clergy; and pilgrimages were organized on a large scale to Poczayev, a well-known Orthodox convent just across the Russian border, which has a miracle-working saint, and has for long served as a convenient centre of Orthodox propaganda. For more sophisticated souls newspapers were founded and, above

all, educational facilities were created to enable young Ruthenes to make their studies in Russia.

The Poles, who had long been alarmed at the growth of the Nationalist movement, now decided to join hands with the New Russophilism. The new movement was particularly welcome as a means of combating Ruthene aspirations at this time; for the domination of the Poles in Galicia was to some extent threatened by the introduction of universal suffrage in Austria: and a prominent Polish magnate opined that 'a little schism in East Galicia would do no harm.' The Russian leaders of the Russophils were approached accordingly through the leader of the Polish Club in the Duma, M. Roman Dmowski. M. Dmowski had no difficulty in getting into touch with Count Bobrinsky, and an arrangement was made between the two. In return for a free hand to the Russophils in East Galicia, Bobrinsky was to use his influence at Petrograd to secure certain concessions to the Poles in Russian Poland. One feature of the agreement was an arrangement by which the Polish landlords, who under the iniquitous system of Church patronage prevailing hold many of the Uniate livings in East Galicia, should be induced only to appoint Russophil incumbents. The Dmowski-Bobrinsky understanding lasted down to the war.

In the early part of 1914 certain Russophil journalists were put on their trial by the Austrian Government at Lemberg on a charge of high treason. A Polish jury acquitted them and they were laden with flowers on leaving the court. A similar trial took place at the same time in connexion with propaganda in one of the two or three Ruthene districts in Hungary. At the Hungarian trial a good deal of peasant evidence was taken. It is interesting reading; for there is nothing so difficult as to discover what the peasants really think of those who speak in their name. The great feature of the Russian propaganda in this case, it appeared, was a wonderful magnifying-glass, through which a certain Father Kabalyuk, a missionary of Orthodoxy, showed the peasants pictures of saints. Other witnesses gave as their reason for following Father Kabalyuk's teaching that 'he prayed in 'such a beautiful voice.' There was no evidence to show that the peasants had any inkling of political drift in the priest's propaganda; and very little evidence against the

priest himself, though he was convicted and sentenced to four and a half years' imprisonment. Two months later, after the assassination of the Archduke, a number of the Russophil leaders withdrew to Russia. It was in these circumstances that the war broke out. The Russian 'liberators' poured into Galicia; and the Grand Duke Nicholas in a manifesto hailed the Ruthenes as brothers who had 'languished' for centuries under a foreign yoke,' and urged them to 'raise' the banner of United Russia.'

The first Russian Governor of Galicia was a member of the well-known Russian family of Sheremetiev. His policy was to secure the support of the Poles for the military occupation and to leave the internal affairs of the province alone. This was by no means the programme of the Pan-Slavs, and they set to work at Petrograd to attack him. After a few weeks he was superseded (September, 1914); and Count George Bobrinsky, a cousin of Count Vladimir, was appointed in his place. Count George received his cousin and a deputation of Russophils on the day after his arrival in Galicia, and asked for their co-operation. A drastic Russifying programme was immediately announced: and as a first step the Metropolitan was deported to Russia, where he remained in exile until the revolution. It was not the first time a Ruthene archbishop had been imprisoned by the enemy of Austria. A hundred years before the Russians had arrested one of Szeptycki's predecessors; and there is, or was, a curious inscription on the wall of one of the rooms in the Archbishop's palace. It ran as follows:

'The enemy of Austria cannot sojourn in this palace. He is tormented there night and day. The imprisonment of the Metropolitan is the guarantee of the victory of our troops, and of the revival of Austria. *Castigans castigavit me Dominus sed morti non tradidit.*'

Having deported the Archbishop, the occupying authorities struck hard at the Nationalists. At last it was possible to 'deal with the Ukranian question as a whole,' and to stamp out once and for all 'the unwholesome growth of sterile 'Mazeppism.' Every newspaper in Ukranian was suppressed; every Ukranian library was closed; the Nationalist educational societies (*Prosvita*) were wound up; and a penalty of

three months' imprisonment or 3,000 roubles fine was imposed for selling, or procuring from a library or from another person, any Ukranian book published beyond the boundaries of Russia (*Order of the Governor-General, Sept.* 30, 1914). Similar rules were applied in the Bukovina, when the Russians occupied Czernowitz (*Order of Jan.* 21, 1915). A large influx of Russian Pan-Slavists had taken place immediately after Bobrinsky's appointment ; and several of the Russian Ministries had sent agents to report on the occupied territory. The most notable of these visitors was the Russian Bishop Eulogius of Volhynia, who has long been an ardent supporter of the Orthodox propaganda, and has won a name as a specialist in bringing over Uniates in Chelm and in Podlachia. He was strongly backed by the Holy Synods. At the very outset of the occupation the Bishops of the Ukranian dioceses of Russia, Kiev, Kharkov, Podolia, Pultava, Kishinev, and Kherson, were instructed to make arrangements to place at his disposal as many Ukranian-speaking popes as he should ask for to undertake missionary work in Galicia. It was further announced in the Russian press that the Holy Synod had set aside a capital sum sufficient to maintain 100 parish popes at 1,300 roubles per annum, and 100 chanters at 300 roubles—rates considerably higher than the Uniate Church can afford. All parishes in which there were no Uniate priests—and many had left with the retreating Austrians—were filled with these popes without further formalities. In others, ' when a parish ' expressed a desire to go over to Orthodoxy,' a vote by ballot was taken.* A three-quarters majority was required in these cases ; and Church property was preserved to the Uniate Church, unless the three-quarters majority included the priest. In all during the Occupation rather over a hundred parishes were provided with Orthodox popes, and fifteen Uniate priests went over to Orthodoxy.

When the Russian retreat began, the Government gave orders to evacuate the civil population, and the Russophils told the peasants that land would be found for them in Russia. The country was to be laid waste, and all barns and agricultural implements destroyed, according to the usual Russian programme. It seems that the programme was not carried

* Count Bobrinsky interviewed by the *Secolo*, April 29, 1915.

out in Galicia with the terrible efficiency which it assumed elsewhere. Nor possibly was the number of peasants actually evacuated more than a few thousands. Accounts from Russian sources of the retreat say that they completely blocked the roads, and were reduced to great privations by the requisitioning of their cattle on the way to feed the retreating troops. There was of course no land ready for them in Russia.

The Duma interpellated the Government on these proceedings and on Ukranian policy in general (August 28, Sept. 10, 1915). One of the Liberal papers of Petrograd published next day the following malicious comment on the debate :

> ' When we were in occupation of Galicia, there was a swoop of Pan-Slavists looking for jobs in the good work of Russification. " Here I am," said Ivan. " Here I am ! " shouted Paul. Now when it is a question of who was responsible for the thousands of unfortunate refugees, enticed into Russia by false promises of land, they are all crying sadly : " It was not I," " It was not I." Ivan says it was Paul. Paul says it was Ivan. As for Eulogius, he is inclined to think he was not given a free enough hand.'

Meanwhile in Russian Ukraine the Nationalist papers, which had sprung up in Kiev, Kharkov, and elsewhere since 1905, had all been suppressed on the day after the outbreak of the war ; and the reversion to the *status quo ante* 1905 in regard to the Ukranian movement was complete. Certain Nationalists were sent to Siberia, amongst them the *doyen* of Nationalism, the historian Prof. Hrushevsky. Others made their way to Vienna, where with the support of the Austrian General Staff they founded a body called the League for the Liberation of the Ukraine, and helped to organize Ukranian legions. But in the Ukraine itself from the outbreak of the war to the outbreak of the revolution silence reigned. The Cadets at one time took up the Ukranian Nationalists in connexion with their campaign against the Government ; but even the very cautious, general terms in which, after their manner—there was no party in Russia which the subject nationalities so deeply distrusted—they declared for ' cultural autonomy ' for the Ukraine, produced a split in the party, and the well-known deputy Struve resigned from the Central Committee (1915). On this silence in Little Russia fell the crash of revolution.

At the outset the Nationalist *intelligentsia* took control. Early in April, 1917, they collected a Ukranian National Congress at Kiev, which pronounced for autonomy within the Russian Republic. Separatist tendencies were not strong at this Congress. The Congress further elected a Council or Rada, so named after the ancient Assembly of the Ukranian Cossacks ; and Prof. Hrushevsky was acclaimed its president. The Rada demanded from the Russian Provisional Government recognition of Ukranian autonomy, immediate local control, and the formation of a separate Ukranian army. The Cadet attitude in reply to these demands was to refer the question to the Russian Constituent Assembly, in which (as both parties very well knew) the Ukranians would be completely outnumbered. In studying the record of their brief spell of power in this year it is astonishing to observe with what light-heartedness the Russian Liberals down to the very last treated the National movements of the subject nations. Their attitude constitutes the strongest proof of the deep roots which Pan-Slavism had struck in Russian political mentality. Failing to obtain any satisfaction of their demands, the Rada set up an independent Government. The conflict was still in progress, and the Rada was drifting towards a complete rupture, when the Bolshevists precipitated matters by their *coup d'état* of November, 1917.

The Bolshevist revolution stripped the outer shell of intellectual parliamentarism, and laid bare to the daylight the explosive forces which were stored within the frame-work of the new State. The Rada was ' Kerenskist ' in character : it was dominated by the Social Revolutionary party (Kerensky's party), with a more or less complacent phalanx of bourgeoisie in the background. It had secured the support of the peasants and soldiers, or at least had met with no opposition from either of these classes—for neither was consulted—partly by appeals to the always latent antipathy which exists between Little Russian and Great Russian, partly owing to a confused idea on the part of the masses that a new Government, ' our own Government,' would surely end the war. But, as has been explained, the population in the towns, whether Ukranian or Russian or Jew, had always been far more susceptible to Russian than to Ukranian Nationalist influences : it read the Russian papers, and belonged to the

Russian political parties. When after the Bolshevist revolution Soviets began to be formed in the towns, some were Bolshevist and some were not; but none were Ukranian Nationalist. Doubtless there were Nationalists amongst their members; but at such a time the trumpet-call of the social revolution dominated all other cries. The Soviets declared a general strike for two days, and allowed no bourgeois papers to appear. The episode opened the eyes of the *intelligentsia* to their own weakness. For the first time the Social Revolutionaries in the Rada were up against the realities of government. To do them justice they attempted to grapple with these realities according to their lights. They saw that, if they were to fight the Soviets, they must base their government on the support of the peasantry. To what other class could they appeal? The nobility, the bureaucracy, the Church, the proletariat in the towns, all were more or less hostile. Except for themselves—and they were not under the delusion (which to the end obsessed the Russian Liberals) that governments can be based upon an *intelligentsia*—only the Peasantry were Nationalists, or could be made into Nationalists. To the peasantry therefore they proceeded to appeal.

Every one knew what the peasants wanted. Every party had long included it as a plank in their programme; and the Social Revolutionaries themselves had made it a special feature. The peasants wanted more land. Accordingly on Nov. 20, 1917, the Rada government issued a *Universale* or decree—it was the old word used of the Hetman's decrees in the sixteenth century—abolishing all private ownership in large estates, Crown and Church lands, and the Imperial Appanages, without compensation. Land Committees were to be set up to carry the decree into effect. The *Universale* further proclaimed various measures, such as State control of production, an eight hours day in factories, and the abolition of the death penalty, with which it was hoped to take the Soviets' water and do something for the prestige of the Rada in the towns. The Land Committees assembled and got to work. The history of the next six months is well known. The Rada made its separate peace. The Soviets with the aid of Russian Bolshevists overturned the Rada and took Kiev. The troops of the Central Powers re-took Kiev, and

re-established the Rada in ignominious tutelage. They had hardly done so when ' a body of peasants ' marched on Kiev, dissolved the Rada, and invested a large landowner, an ex-Russian general, with dictatorial powers and the title of Hetman. The Hetman immediately proclaimed the restoration of the rights of private property, ' the foundation of culture and civilization,' and treated as null and void the decrees of the Rada Government.

This bewildering political record is not intelligible without its social and economic background. The *Universale*, which confiscated the large estates, did not transfer the land into the possession of the individual peasants, but to district and communal committees. The theory of land-tenure, which the Social Revolutionaries responsible for the *Universale* affected, was that every peasant should have as much land as he could cultivate without hired labour, but in usufruct only and not in possession ; he was not to be able to sell or bequeath it : the land was to belong to the community. This was substantially the system on which the greater part of the peasant-land in Great Russia, and some of the peasant-land in Little Russia, was held before the Revolution. It was the system stereotyped by the Tsar Alexander II., when he abolished serfage in 1861. With the confiscation of the large estates it would be possible to apply the system on an infinitely more generous scale. In the Black Earth Zone, in which most of the agricultural Ukraine lies, the peasants at the abolition of serfage received allotments ranging from $8\frac{3}{4}$ to $3\frac{3}{4}$ acres. It is calculated that in this region $16\frac{1}{4}$ acres is the minimum on which a peasant family can support itself without seeking outside work. It might seem therefore that all that was needed was to increase the peasants' allotments to $16\frac{1}{4}$ acres apiece out of the new confiscated land of the large proprietors. So the Social Revolutionaries thought : and up to this point the peasants cordially agreed with them.

But there was a fundamental difference between the peasant standpoint and that of the Social Revolutionary *intelligentsia*. The *intelligentsia* did not believe in the institution of property. The peasants believed that some one else was in possession of their property. Manifestly the two could co-operate up to a certain point, but no further. When the Land Committees were formed, and the distribution of the land began, difficulties

at once arose. The legislation of 1861-1863, which abolished serfage in Russia, assumed (with certain qualifications) the existing communal cultivation of the land; but it distinguished between communal ownership and private ownership by the members of the commune. A Russian commune is a kind of large farm. For technical reasons, such as the necessity of providing every year a definite amount of pasture, it cannot be left to the individual cultivator to do what he pleases with his land. He has to leave a certain proportion to pasture, observe the established rotation, and the like. This is what is meant by communal cultivation; and prevails alike under private or communal ownership. The chief practical difference for the individual peasant between private and communal ownership is in the matter of redistribution of the land. Communally owned land is redistributed at certain intervals between the members of the commune; and one of the chief economic arguments against the commune is the tendency which the system of redistribution has to discourage individual effort. What advantage is it to Ivan Ivan'itch to keep his land clean or manure it, if at the end of ten or fifteen years he may be obliged by the commune to hand it over, and to take in exchange the land of Nikolai Nikolayevitch, who is a drunkard and does not even take the trouble to plough? In communes, on the other hand, where the land is privately owned, there is no redistribution. At the time of the Abolition the system of communal ownership was adopted for the great majority of communes in Great Russia, while the system of private ownership was adopted for the great majority of communes in Little Russia. When the *Universale* was issued, therefore, the principle of communal ownership was by tradition alien to all but a minority of the Ukranian peasants.

Provision had been made in the Abolition Law of 1861 to enable freed serfs to purchase their allotments by paying off the redemption capital, and to take them out of the commune. These facilities were greatly increased by the foundation of the State Land Bank in 1883. And recent agrarian legislation has been directed avowedly to the abolition, not merely of communal ownership, but of the whole system of communal cultivation. The far-reaching Stolypin reforms of 1906-1908 declared the legal abolition of communal cultivation

in all communes with private ownership, that is to say, in the majority of the communes of the Ukraine. This meant that thenceforward the Ukranian peasant was the legal owner of his allotment, in almost the same sense that a French or German peasant is the owner of his land. Specially appointed bodies were entrusted with the work of constituting self-contained, self-supporting farms, and breaking up the village system. To provide additional land to carry out these reforms, certain Crown lands were made over to the State Land Bank; and the Bank acquired in addition a number of private estates. In the six years after the passing of the Stolypin Laws 738,980 peasants were settled in self-contained farms; and 585,571 peasants were settled in groups smaller than the communes according to a prepared scheme specially designed to form a transition stage between communal and individual cultivation. The Bank in the same six years transferred to peasants some 18,000,000 acres. As in the previous twenty-three years of its existence, from its foundation in 1883 down to the Stolypin reforms, it had dealt only with 22,000,000 acres, it will be clear that the reforms had notably quickened the process of transition to private ownership, even though no more than the fringe of the problem had been touched.

In communes with communal ownership the Stolypin Laws made it optional for the communes to go over to private ownership. The majority of the Ukranian communes, having communal ownership, have availed themselves of these facilities. The truth is, the commune is an institution very well suited to the Great Russian temperament, and very ill suited to the Ukranian temperament. The commune appeals to that fundamental belief, which is ingrained in the Great Russian, in the majesty of the whole and the insignificance of the unit. Many of those who know Russia feel that that belief is amongst the noblest manifestations of the Russian character. However that may be, it forms no part of the Ukranian character. The first thought of the Great Russian peasant is for the general well-being. The first thought of the Ukranian peasant is for his own. He is profoundly individualist. He admires success, as the English or Americans admire it; he may envy and abuse it, but the sight of it excites his emulation. It is not so with the Great Russian

peasant. There have always of course been individual peasants in the Great Russian communes who have grown richer than their neighbours, and acquired their own land in private possession. But their example has rarely been infectious: they have been more disliked than admired by their fellow-peasants, and their success has been attributed rather to the will of God than to the efforts of the successful individual. This psychological difference between the two peoples has undoubtedly tended to retard in the case of Great Russia, and to promote in the case of Ukraine, the formation of a class of land-owning peasants. But there was another factor, an historical factor, tending to differentiate the economic development of the two peoples.

Three and four centuries ago, when the Ukraine formed part of the dominions of the Polish Crown, large numbers of peasants, to escape the cruelties of Polish rule, fled to the steppe and organized themselves in communities of brigands or Cossacks. There were several of these communities, but the largest was that of the Zaporoguian or Zaporovian Cossacks, whose country was the region (now cultivated but then virgin prairie) to the north of the Black Sea, *za porohi* 'beyond the rapids' of the Lower Dnieper. After the Ukraine passed from Polish into Russian hands, these Cossack communities were gradually dissolved. A section of the Zaporovians, unwilling to settle to a purely agricultural life, migrated to the Kuban region north of the Caucasus, and form to-day the Kuban *voisko* of the Cossacks. They still speak Ukranian. All the rest were given grants of land, and settled as free peasants in what are now the governments of Pultava, Tchernigov, and Kharkov. Their descendants, though they have no military organization and have nothing to do with the true Cossacks of the Don, the Caucasus, and Siberia, are commonly called 'Cossacks' to this day. These Cossacks, or free peasants, who have never known serfage and have owned their own land for four or five generations, have formed in Ukraine a nucleus, round which all those more enterprising elements among the peasantry, who through the Land Bank or otherwise have acquired their own land, tend politically to group. For years past the Ukranian peasant has had the standing object-lesson of a whole class of successful land-owning cultivators existing on the same soil

and under the same natural conditions side by side with a whole class of unsuccessful communal cultivators. The object-lesson has not been without its effect ; and now that the land, as by miracle, has become available with which to make experiments, it has suddenly acquired acute practical significance.

It has already been shown that the land allotments at the Abolition were too small. Since the Abolition the population in spite of a very large emigration has increased by 43 per cent., whereas it is estimated that the additional land made available for the peasants, whether by purchase or leasehold, represents an increase of only 20 per cent. This shortage of land has had the effect of bringing the peasant once more into economic dependence on the landlord, and has gone far to undo all the work of the Abolition Laws. The process has been as follows: The communal land proving insufficient to provide the pasture, which is indispensable for communal cultivation, the peasants have been forced to apply to the neighbouring large estates for the lease of pasture-land. The large estates let it as a rule not in return for money payments but for labour. The peasant undertakes to harvest so much of the proprietor's arable, and in return is allowed so much of the proprietor's pasture on which to graze his cattle. Frequently a commune makes an agreement of this sort for common pasture for the whole village. Where the land-shortage is especially acute the peasants may even be forced to rent arable from the proprietors. Under this system it is clear that the direct compulsion to work, which existed in the time of serfage, has merely been exchanged for indirect compulsion; and the worst economic feature of serfage, the fact that the peasant's interest is to do as little as he can, is retained.

The peasant-land under this system is steadily becoming less fertile. Before the Abolition the system of tillage was to keep a field under cultivation year in year out, till the soil was visibly getting impoverished, and then leave it under pasture for twice the same number of years. The original steppe cultivation was five years arable followed by fifteen years pasture. It was reckoned that during this fallow period the pasture was at its best from the fourth to the eighth year, and that by the end of the fifteenth year the land was virgin

steppe once more. But this system implied that only one-fifth of the land was kept under cultivation. That is no longer possible even on the large estates. On the exiguous peasant allotments it is wholly impracticable. The result has been that the pasture-land has been steadily diminished, and the dependence of the peasants on the large estates proportionately increased. The peasants will now plough a field for six years on end, and then leave it to pasture for three years only. Many communes have no communal pasture at all; and the soil is continuously ploughed with some such rotation as rye, spring wheat, rye, barley, and (when the soil has been quite exhausted) buckwheat. With the diminution of pasture goes the weakening of the cattle. Then the peasant gives up the plough, which, primitive as it is, at any rate penetrates three inches into the earth. But it requires a good yoke of oxen to draw it. In place of it the peasant uses the *sokha*, which requires only one strong ox or a weak yoke, but on the other hand penetrates only one and a half inches. If his cattle weaken still more, the peasant gives up ploughing, sows his winter corn on the stubble of the spring corn, and contents himself with scratching over the soil with a kind of large rake, made of wood with three to six iron teeth at intervals of about five inches. The end is emigration. In the last year before the war, for which statistics are available, of all the peasants from European Russia emigrating to Central Asia, 62 per cent. came from the Ukranian provinces, that is to say, from the Black Earth Zone, the granary of Eastern Europe!

The contrast between a peasant village with communal cultivation and a village of Cossacks owning their own land leaps to the eye. The appearance of the fields is quite different. In the summer, when the corn is full grown, it is seen to be free from tares on the Cossack land, whereas on the peasant land it is usual to find it more or less overgrown. In the winter the Cossack fields are covered with heaps of fertilizer; the peasant fields have none. The villages of the two are not very different to look at, but the houses of the Cossacks generally have a garden attached, which with the peasants is hardly ever the case. In their gardens the Cossacks grow vegetables for the market on an extensive scale. Though it cannot be said that the Cossack's agriculture is scientific—for scientific agriculture presupposes educational

attainments to which the Cossack is a complete stranger—he is keen to make it profitable, whereas the majority of the peasants do not aspire to be more than self-supporting. Socially the Cossacks have a peculiar status, midway between the peasantry and the *petite noblesse*. The peasants sometimes call the richer ones *polupanki* (half-lords), though their standard of living is in no way different from that of the peasants. And since on the one hand they have never had the burden of the redemption dues, and on the other hand they have never felt the need either of French novels or of English governesses for their children, they have been steadily growing richer, whereas both the *petite noblesse* and the peasants have been steadily growing poorer. A large number of these Cossacks, having holdings large enough to be self-supporting, have lived on them, taking no employment from anyone else.* Richer Cossacks rent land extensively from the large and medium estates, paying for it almost always in cash and not in labour. In addition to renting land, they frequently purchase land, sometimes even dispensing with the aid of the Land Bank. In many districts, where they are settled, they are slowly breaking up the large estates. Some own many hundreds of acres. The German economist, Prof. Schulze-Gävernitz, in his studies of the Black Earth Zone (*Volkswirtschaftliche Studien aus Russland*, Leipzig, 1899), describes a visit to one of these Cossacks in Kobelyaki, who owned nearly 3,000 acres. This man had just purchased an estate, with the château of the former owner thrown in ; and Schulze-Gävernitz found he had converted the parquet of the drawing-room into a threshing-floor !

There is no doubt that the Cossacks have led the opposition to the introduction or restoration of communal ownership, which culminated in the *coup d'état* of May, 1918. That the bulk of the peasants relish their lead is however far from probable ; for the Cossacks have not a reputation as philanthropists.

' We know you Cossacks,' the poorer peasants say ; ' you

* As stated above, 16½ acres is estimated to be the minimum on which a family can be self-supporting; 40 acres is reckoned the maximum which a single family can work, or with the use of labour-saving machinery anything up to 80 acres.

'are all fist. You grow richer, while your neighbours grow 'poorer. Why did all the souls of Petrovka village, save 'three, emigrate last year to Siberia? Because the Cossacks 'had bought up their allotments. We grow bread for our 'children to eat; but the Cossacks sell corn to the Jews in 'Odessa. . . .'

And so on. Such things were no doubt said a hundred times over on the Land Committees formed under the short-lived *Universale*. But this time the Cossacks could reply:

'There is land enough for all now, brother: why not take 'it, and do the same?'

This *argumentum ad hominem* seems to have been effective; though doubtless its success would not have been so dramatic or immediate, but for the German desire to materialize some of the fruits of the famous Bread Peace. But, with or without the German occupation, and whether the *latifundia* are appropriated *en bloc* or broken up gradually, it seems certain that the Cossack party, that is to say the Cossacks themselves and all the richer peasants, hold the economic future in Ukraine. They represent the process of transition from primitive to modern agriculture. The process began long ago, and was inevitable with the growth of the population and the passing of the steppe. It was immensely accelerated by the Stolypin reforms. Even a strong Government, such as the Rada was not, could do little to arrest or deflect it. Great Russia is perhaps capable of sacrificing economic progress to a social ideal; for the Great Russians are of those peoples who have faith, and with them all things are possible. But the Ukraine is not Great Russia; and no speculations as to the future can be of value which do not take this fundamental consideration into account.

O. DE L.

THE CLAIMS OF AFGHANISTAN

THOMAS CARLYLE once declared that it was Russia's mission in the world 'to drill anarchic populations 'into order.' No doubt that phrase impressed many people in his day, although it sounds ironic now in view of the turn events have taken. Westerners have been too prone in the past to have eastern questions 'solved' for them by phrase-makers, and especially by those who have looked eastward with western eyes. Happily, nowadays more intimate knowledge has kindled sympathy with populations hitherto called 'anarchic,' who have had bitter experience of what is implied by 'drilling,' especially when the drill-sergeant is Russia. It is beginning to be recognized that the anarchic conditions to which Carlyle referred were not always caused by the 'populations,' but were actually the work of the Power he lauded and defended.

To the Afghan mountaineers, who love liberty and independence as dearly as do Carlyle's own countrymen, Russia has ever resembled, rather than a peacemaker, a monster like the Cyclops Polyphemus in Homer's 'Odyssey,' the one-eyed giant who regarded rovers and traders of the lands as robbers and law-breakers, and imprisoned them in his cave with purpose to devour them one by one. In the cave of Russia's Empire many a lover of freedom and justice has lain awaiting his inevitable doom. Even now, when the Russian Cyclops has been blinded, his huge Bolshevik hands are groping and scratching round the sides of a darkened cave to clutch and crush anyone who may make endeavour to escape from captivity and enjoy once again the freedom of the open air and the sunshine of independence. Carlyle's sympathies were entirely with the Cyclops. He took no thought of the Eastern Trojans who lay huddled in the cave-like Empire of the man-eater, experiencing the cruelty and greed of a tyrant whose 'drilling' brought no moral uplifting and certainly no contentment and no peace of mind.

Among the many victims who have suffered from Russia's treachery and aggression is Afghanistan. But for the inter-

vention of Great Britain she might have suffered extinction as an independent nation. As it happened, the land of my ancestors escaped from a wretched doom with a few wounds and some degree of mutilation. As France was shorn by a tyrannous enemy of Alsace and Lorraine, so was Afghanistan of provinces whose populations still look with imploring eyes towards Kabul. Surely the time has now come for the recognition of the national aspirations of the mid-East as well as of those of Europe. Are the Serbians of Bosnia and Herzegovina, the Czecho-Slovaks of Bohemia, and the Alsatian and Lorrainian Frenchmen the only peoples whose wrongs are to be redressed and whose past is to be remembered so that justice may be done now and for all time ? The glorious victory of Right over Might has ushered in a new era in human affairs.

> 'The world's great age begins a-new,
> The golden years return.'

So sang, like an inspired prophet, the great liberty-loving English poet Shelley. Let the mid-Easterner of Asia as well as the Western European realize that the 'golden years' have dawned for the entire world of men and not merely for a portion of it.

The unliberated provinces for which I wish to urge a plea lie to the north-west and north-east of Afghanistan. That Afghanistan has a moral claim to the restoration of these lost portions will be presently shown; that she deserves well of Great Britain and her allies is beyond dispute. An absolutely correct attitude has been maintained by the 'Buffer State' during the war. The Ameer has loyally observed his treaty obligations, and proved himself the soul of honour—one worthy to be trusted. Having proved himself during the darkest days of the war worthy of the confidence placed in him, surely he can be trusted to act correctly and honourably in the future days of peace, when justice is to prevail and the sword is to be converted into a ploughshare.

Just as Italy was formerly deprived by Austria of strategic frontier posts so that in the event of war the military advantages might, from the outset, rest with the Austrian invader, in the same way Afghanistan was deprived by Russia of her strategic outposts so that she might be all the more

easily clutched by the claws of the Bear and crushed to death.

Seventy years ago an eminent British traveller in Central Asia conjectured that sooner or later the country lying between Orenburg and Afghanistan would be added to the Russian Empire. He perceived, as did others in his day, that the Russian policy everywhere was to take two steps forward, and then when a vigorous protest was raised in Europe to take one backward. So did Russia creep by slow degrees across the areas generally rendered 'anarchic' by her own action. She first caused the trouble, and then made the trouble an excuse for the further action which Carlyle called 'drilling.'

In 1893 the soldiers of the White Tsar were at Kushk in north Afghanistan and at Krasnovodsk on the shores of the Caspian, but for a time Russian administration showed no apparent signs of permanency. The Russians tarried, awaiting events, but ultimately made themselves quite at home. From the outset the Russian system of government in the mid-East lacked that moral impulse which is the best guarantee of peace and contentment. No attempt was ever made, as in India for instance, to secure the amelioration and progress of the subject races. Peace terms were framed, to please Europe chiefly, but they were never observed in the occupied territory. The heartless treatment of subdued peoples has ever been a feature of Russian sway over alleged 'anarchic populations;' the 'drill-sergeant' was the real anarchist.

Russia's plans for the conquest of Asia were as deliberately planned as those of Germany for the conquest of all Europe and the rest of the world. The only difference was in method. Russia was content to proceed on the instalment system, while Germany contemplated a speedy and wholesale conquest of a world suddenly disorganized by a 'knock-out blow' treacherously delivered. The Russian method proved, so far as Asia was concerned, to be successful. Her plans were matured long before 1845, when she found a trivial excuse for war. The merchants of Orenburg complained that the caravans coming up from Bokhara and Tashkend were looted by the Kerghiz on their way through the Steppes. This excuse for military action was hailed by the army officers.

The Lesser Horde was immediately conquered, and the chiefs of the Middle and Greater Hordes were invited to become Russian pensioners with residences at Moscow. Within eighteen months all the strongholds of the Steppes were flying the Russian flag. The Kerghiz aristocracy was abolished and the administration was entrusted to the Governor of Orenburg. Thus was taken the first step towards the desired conquest of the Land of Tamerlane. In 1867 Tashkend was taken. An excuse was found for further advances, and in 1868 Bokhara lost its independence. Although the Turkomans gave no cause for Russian interference they were next attacked.

General Skobeleff, the victor at Plevna, was a hero in the west. It seemed as if the liberator of Bulgaria could do no wrong. Yet, the truth is, he could not endure to see the Turkomans a free people. Although the slave trade had been abolished in the Bokhara markets, it was alleged that some Persian youths were still being seized and sold secretly, and this was used as an excuse for aggressive war. Skobeleff issued an ultimatum to the Turkomans, accusing them of engaging in the slave trade, and imposing an enormous fine, which, he stipulated, must be paid within a week in 'hard 'cash,' failing which military action would be taken. The wealth of the Turkomans consisted chiefly in cattle and camels, the sale of which could not be effected in less than a month if they were to be sold at Bokhara or Meshed. On the third day of the fateful week some Turkoman chiefs visited the Russian general and begged to be given time, offering, at the same time, a portion of the fine. An extension of time was refused; Skobeleff's army could not return to Tashkend when an opportunity offered to conquer Turkomania. When the week expired the Russian general let loose his dreaded Cossacks, who proceeded to exterminate the Turkoman population. Men, women, and children were ruthlessly slaughtered. For twenty-four days the fort of Geok Teppe was besieged. It fell on the 24th of January, 1881, and the walls were levelled to the ground. He made a desolation and called it 'peace.'

It is said that when Skobeleff entered the village in his white uniform he lamented, like Alexander the Great, that there were no more battles for him to fight.

Turkomania was subdued in a sea of blood, but Merv still

held her own. Ali Khanoff, a Moslem officer in the Russian army, undertook to accomplish the conquest of that desirable centre. His plan was the plan that proved successful when Troy was taken. One night, disguised as a trader, he entered Merv with four hundred disguised soldiers. The residence of the Khan was surrounded, and soldiers were posted at various strategic points. Merv was captured without a shot being fired, and Ali Khanoff was able to proclaim from the top of the city minaret that Merv had come under Russian rule. For his services he himself was appointed Governor.

Bokhara was governed by the lax and indolent Khan Muzzuffurdin when Russia, in 1873, made the alleged slave trade, the extortionate taxation, and general misrule excuses for absorbing the province. The Khan was feeble and submitted to the Russian terms, which involved a reduction of his army and the presence in his palace of a Russian adviser, who was really a representative of his overlord the Tsar. Among the terms imposed was the acquisition of land on the Afghan border and the exploitation of the Oxus navigation. In 1887 steel-built Russian steamers began to ply on the great river, and from that time it was controlled by the military. Constant intercourse was kept up from Alexandrovsk near Khiva to Kilif, which is situated almost at the termination of the south-east corner of Bokhara in the north of Afghanistan, only about one hundred miles from the most important Afghan town of Balkh, through which pass caravans carrying Indian or Afghan merchandise. Kilif became an important Russian customs station.

It should be borne in mind that the Russian military authorities are responsible both for the absorption of Central Asia and for the administration of this conquered area. The general commanding the Russian forces has always acted as the administrative head of the subdued provinces. Nor is this all. The surveying of the country and the 'rectification' of the frontiers have been in military hands. The Transcaspian Railway was the idea of General Annenkoff, who laid the line from Uzun Ada, a point south of Krasnovodsk on the Caspian, to Kizil Arvat, a distance of 145 miles.

To the European Powers, and especially to Great Britain who was being stirred by the Russian aggression and had fears for India, the Russians declared that their motive

for constructing this railway was purely a commercial one; but Annenkoff often confessed in private, and even sometimes in public, that the extension of the line to Herat and a greater extension to Quetta were future possibilities of his favourite scheme. The Bear was advancing cautiously, slowly, but it fully intended to 'get there.'

Kizil Arvat did not remain the terminus of the military railway after 1885, for at Kushk a clash had occurred between the Russians and Afghans. The potentialities of the railway were then fully recognized at Petrograd, and it was decided to extend it further. Within a year it had reached Merv, and in 1887 it was advanced to Bokhara; then it was extended to Tashkend so as to be brought into direct touch with the Orenburg-Tashkend line. The military character of this railway extension cannot be overlooked.

Enough has been written here to emphasize the fact that the Russian occupation of Central Asia was dictated by military considerations. The Russian army has drilled anarchic and non-anarchic populations into submission for no other purpose than to advance on India—the ultimate prize which excused every atrocity and every act of Russian oppression in the mid-East. While Earl Granville was giving consideration to the problem that had arisen, the Russians increased their activities and kept advancing, the only real opposition encountered being that afforded by such natural obstacles as waterless tracks, hot summers, and severe winters. Not only was Turkomania fully absorbed, Afghanistan was being nibbled at. Difficulties were arising with Afghanistan in the Pamir regions, and open conflicts between outposts were beginning to reflect the realities of the political situation. At Herat, Russian propaganda was being industriously promoted not only among the Kizivilbash population, which saw with satisfaction Russian officers visiting the Governor, but even among soldiers. The Amir found it necessary to have the Herat garrison changed every second month.

The deplorable Panjdeh incident is well known to students of mid-Asiatic politics. Russian soldiers made a treacherous attack on Afghan troops and ruthlessly massacred them, and Afghanistan has never forgotten what was really an atrocity and not an act of war according to international law. The situation was smoothed by the British intervention, and

Panjdeh was bartered for Zulfikar. But although the Boundary Commission removed causes of friction in this district, it cannot be overlooked that Afghanistan was called upon to make a serious sacrifice in the interests of peace, for the Russians were given possession of the chain of Karabyl Hills and the uplands of Murghab, so that they secured strategic advantages and were placed in an advantageous position, threatening Maimana on the one side and Herat on the other.

At the time the Panjdeh massacre occurred Amir Abdurrahman was in India conferring with Lord Dufferin. He makes reference in his book to the incident as follows: 'The news 'of the Russian aggression and the taking of Panjdeh was 'sent to me by Lord Dufferin himself, but I was not a man to 'get excited, and therefore took the matter calmly as a lesson 'for the future.' After returning to Kabul the Amir sharply criticized General Lumsden, who was responsible for the British non-intervention on that occasion.

The West Ridgway Commission completed its work in 1887, and the frontier line then ran from Zulfikar Gulran to Khoja Salar. Sir West Ridgway reported to Lord Salisbury that the Amir did not think Panjdeh was worth fighting for. 'At the interview between Lord Dufferin and the Amir 'at Rawulpindi,' wrote Sir West Ridgway, 'the Amir without 'any pressure by the Viceroy decided to give up the valley. 'Panjdeh was lost before the demarcation began.' No one can doubt the intimate knowledge that Sir West Ridgway acquired regarding those regions in the mid-East, but Afghans do not share his view that 'through the demarcation 'of the frontier he (the Amir) has not lost a penny of revenue, 'a single subject, or an acre of land which was occupied or 'cultivated by any Afghan subjects.' If the area was so worthless why was Russia so anxious to obtain possession of it?

It should not be overlooked that at the time of the battle of Panjdeh the Afghans were in possession of territory ten miles further to the north-west, as far as Ak Tepe. The Murghab valley is not worthless. It is exceedingly fertile, and has, as has been indicated, an undoubted strategic value.

At the time this incident occurred little was known in this country regarding the country seized from Afghanistan.

The Russians have since demonstrated its importance. The railway line was extended from Merv to Panjdeh and then extended like two claws, touching the northern boundary of Afghanistan. To-day the termini are Kushk and Taun Sang, which threaten Herat on one side and Balla Murghab on the other. The fertile valleys of Murghab and Harirud can furnish with an adequate supply of provisions an army of a quarter of a million for a period of not less than six months. It is not surprising, therefore, to find that Afghanistan now looks forward to the restoration of its 'Alsace,' so unjustly seized for purely military reasons. British interests are involved: Herat, the 'key of the gate of India,' will continue to be threatened until Afghanistan regains possession of its lost territory.

Some may urge that the Amir made a willing sacrifice when Panjdeh was exchanged for Zulfikar. But it must be remembered that when the Amir was consulting with Lord Dufferin he was greatly concerned regarding problems of reconstruction in his kingdom. His chief desire was for the firmer establishment of friendship with Great Britain, and he found himself unable to resist British concessions to Russia. The greater question of the integrity of his kingdom overshadowed the lesser one of the loss of his 'Alsace.' The Amir's position was indeed a precarious one. But for British intervention Russia would have undoubtedly dealt with Afghanistan as it had dealt with Bokhara. As it was, the Amir secured the solemn promise that British forces would, if necessity arose, strike a blow in defence of Afghan independence. It would have been highly detrimental to Afghan interests to have protested too vehemently against the Panjdeh incident, although British forces were near the scene of the massacre, and did not intervene. One thing is certain, the loss of Panjdeh was keenly felt by the Amir and his subjects. It is still keenly felt. We in Kabul speak of it still pretty much as the French have spoken regarding their province of Alsace.

What I wish to impress upon my readers is that the threat to Afghanistan remains. As late as 1893 the Pamir outposts were giving trouble. When the Durand mission was on its way to Kabul the Russians attempted to accomplish by force what they could never accomplish by right. A detachment

of Russian soldiers advanced to Murghab (Pamir) and threatened Badakshan. They were, however, compelled to retire on account of the strong opposition displayed by the Afghans. How serious the situation was in this area in July, 1918, when Bolshevik and German activities were directed to secure the invasion of mid-Asia by a strong force making use of the Transcaspian Railway, will not be realized until the full story of the war comes to be written. The Allies owe not a little to the steadfast and correct attitude maintained by the Amir of Afghanistan, who thwarted all the plans of the Central Powers to corrupt his subjects and set ablaze the torches of war on the frontier of India.

It is quite evident that as long as the Russian outposts continue at Kushk, which is only eighty miles from Herat, the danger of international complications will remain. The question therefore arises whether the restoration to Afghanistan of the territory lying between Zulfikar, Kushk, and Marachak to the south of Panjdeh, and Puli-Khatum to the north, can be regarded as an act of disintegrating Russia. The Afghan view is that such a restoration would merely be an act of international justice. The territory in question never belonged to Russia, and its retention by Russia cannot be defended any more than the retention of Alsace by Germany.

The question of the future of Bokhara also arises. This Khanate, which has so long fretted under the over-lordship of Russia, should be placed under international jurisdiction. Although the Khanate possesses an army, a court, and a Khan, it has become virtually a portion of the Russian Empire, and the national aspirations of the Uzbeks are severely held in check. The Uzbeks are the Czecho-Slovaks of mid-Asia. They have had bitter experience of Russian oppression, and they have good cause to mistrust Russian promises. One has only to recall that the promise of the restoration of Samarkand made as far back as 1870 has never been fulfilled. The Russians have exploited Bokhara and secured Bokharan trade to the detriment of native interests. On all goods from Afghanistan or India heavy tariffs have been imposed, with the result that the British and Afghan trade has made no headway. Not only has Central Asiatic trade been captured by Russian merchants, but the bulk of the trade

with northern Afghanistan has also passed into their hands.

From north-western Afghanistan let us pass to the eastern or north-eastern area and glance at the conditions prevailing there. Afghans consider that the time has now come to restore to them the provinces of Shignan and Roshan in the Pamir region, which were ceded to the Russians in 1895. The Afghans lost these provinces in consequence of an agreement arrived at between Russia and Great Britain, and it cannot be overlooked that Russian diplomacy gained the advantage of British by a quibble. The boundary line fixed was to run from Sarikul, or 'Wood Lake,' on the east to the junction of Kokcha river with the Oxus. Badakhshan, with its dependent district Wakhan, was included within Afghanistan. But the understanding was vague. Difficulties did not arise until the time when the late Amir was rearranging his kingdom, which had been disintegrated during the time of Sher Ali and Dost Mohamed. In 1893 Abdurrahman took possession of Roshan and Shignan, and this was regarded by the Russian Government as an infringement of the treaty of 1873. Earl Granville was appealed to and replied to Russia that he could not ask the Amir to withdraw his forces from the two provinces he claimed without proper enquiry being made, and proposed that a joint commission should be appointed at once to enquire into the matter on the spot. This was agreed to, but before the commission arrived a dispute arose between the Russian outposts and the commander of the Afghan forces in Roshan. A Russian officer, adopting familiar Russian tactics, refused to await the decision of the Boundary Commission. He advanced with a detachment of Cossacks to the Afghan general's tent and demanded immediate evacuation by the Amir's soldiers. A hot conversation ensued and the Russian officer, losing his temper, slapped the Afghan general on the face, with the result that a free fight took place and men were killed on both sides.

This incident was quite in accordance with what had happened time and again in Central Asia. Russian officers who succeeded, as did this officer, in stealing a few miles of territory by means of sharp practices were rewarded; if they failed they were punished. They undoubtedly acted

upon instructions received from their superiors. Russian diplomacy has always argued that the end justifies the means, however dishonourable the means may be.

The Boundary Commission gave its decision in favour of Russia. It has to be recognized, however, that this decision was based on Russian geographical information. Otherwise the British representatives could never have consented to allow only about sixteen miles of neutral territory to form a buffer between the Russian Empire and the north of India.

The stream issuing from Lake Victoria and falling into the Oxus was taken as the boundary. But the dispute has always been—and it is a most vital point—whether the Panja river or the Aksu Murghab river is the parent 'trunk' of the Oxus. The Boundary Commission of 1895 decided (against the views of not a few authorities in Great Britain) that the Panja was the parent river, and that decision determined the fate of Shignan and Roshan. There are very strong arguments in favour of the other view that the Murghab is the parent of the Oxus, and the Panja merely a tributary.

(1) The name Oxus, by which the greater river has been known since the days of Alexander the Great, is a corruption of the Turkish work 'Ak-su,' meaning 'white water.' The Murghab is known by this name in its upper reaches.

(2) The entire length of the Oxus-Murghab-Bartang is greater than that of the Panja. From 'Wood Lake' the Aksu Murghab, rising at Istigh, passes through the valleys of Tashkurghan, where it takes the name of Aksu. It is 250 miles long, while the Panja is 200 miles.

(3) It receives a much greater number of tributaries than does the Panja.

(4) In 1884, at the meeting of the Royal Geographical Society, Sir Lepel Griffin, whose name is closely associated with many Afghan problems, declared that geographically Shignan and Roshan belonged to Badakhshan. 'Those 'wild and isolated regions,' he added, 'with a very sparse 'population, and yielding no revenue, might appear to many 'Englishmen to be of little political importance, but they 'command some of the easiest passes into India.' Sir Henry Rawlinson also favoured the Afghan claim, and held that as

the Oxus was to be considered as the boundary, the Murghab should be regarded as the parent river.

It is highly desirable that serious attention should now be paid to the settlement of the Pamir question. Afghanistan has been too long regarded by the outside world as a land of mystery, and during the present war scarcely any attempts have been made to draw the veil. During the great war, which has happily ended in victory for the Allies, repeated assurances have been given by the present Amir to the Viceroy of India that his policy of benevolent neutrality would be maintained, and that all treaty obligations would be honoured faithfully. The advocates of the dangerous pan-Turanic movement, Germany's insidious agents, had found their way into Kabul territory. A British statesman has disclosed the fact that the head of the German mission had succeeded in entering Afghanistan, but had no chance of finding his way out again. The British authorities in Persia obtained possession of the diary of one of the members of Captain Niedermayer's mission to the east. 'It is thought,' wrote the spy, 'that the Germans have been brilliantly 'received in Afghanistan, but the Amir will not take the 'slightest action, at least against the English.' This is a significant testimonial to that honourable ruler, Amir Habib Ullah Khan.

The time has now come to appeal to the British public to take an active interest in Afghan affairs. It has too long been the habit to regard them as the concern of the Indian Government alone.

We, the Afghan people, are anxious to receive the British as friends, and even as allies. The good relations between Great Britain and Afghanistan may be of modern growth, but they are not necessarily the less real on that account. Ancient misunderstandings and differences are things of the past. They cannot be revived. Afghanistan has had sufficient experience of the honourable and correct attitude maintained by the British Government to prevent her from ever desiring a return to the unhappy conditions of the past. Knowledge has also been widely spread of late years of the British sense of justice and love of liberty; the trust imposed by the Afghan people in Great Britain during the war is a direct result of this knowledge. The hope is entertained

that Great Britain will see Afghan grievances removed, and her Alsace-Lorraine problem satisfactorily solved for all time. As one who understands the Afghan point of view I cannot too strongly impress upon the British people the necessity of inaugurating a new era in Afghanistan by espousing her cause in connexion with the lost provinces, both in the north-east and in the north-west, and thus helping to safeguard her from the threat of invasion from Russia.

In the past, I may add, the Afghans have regarded the railway to Kushk as a potential means of invasion. This prejudice would be removed if the Afghan territory through which the railway runs were restored with full guarantees, backed by Great Britain's word of honour. Then a new era in the trading and personal relations between the British Empire and Afghanistan would begin, and we could count upon continuous progress in the happy days to which the whole world is looking forward with eyes of trust and hearts full of sacred hope.

Ikbal Ali Shah.

SCIENCE AND NATIONALITY

THE position of science, in its relation to the conduct and polity of nations, is a theme which has been in the thoughts of most scientific men during these sad years. The end of the first act has come, but we know not how soon the tragedy may begin again. In old time mankind was wont to turn to priests and lawgivers for counsel. We are witnessing the ruin to which a world professing the ideals of religion and law may come. Those ideals claim to have made the world we see. The counsels of science are as yet untried. Can scientific men—the makers of natural knowledge—help where the rest have failed? That is a question we may well consider in this partial respite from horror.

A great cry has gone up in all the land; and not in our land alone but through all the earth, for is there a house where there is not one dead? Caught in the wheels of a hideous destiny the young men of the nations and the innocent boys have been torn to pieces. The shattered victims from whom kindly death has turned aside wring our hearts in every public place. They went at the high call of Duty. The altar upon which they bled bears the glorious names of Patriotism and Duty. From the enemy cities and from their quiet villages has poured another stream of youth to perish at the selfsame shrine, calling alike on Patriotism and Duty with, we must believe, an equal devotion. So it has been from the beginning; must it continue so to the end?

Biologists know that the life of one creature is the death of another. Trained from their earliest years to face natural fact, knowing with a precision and vividness which the layman seldom attains that every animal and plant, and every race and strain of living things, holds its place on the earth by power and power alone, it is not they who cherish dreams of equal rights and universal peace. Like other men they may seek peace and ensue it, but in their hearts they know that never shall true peace be found. With sincerity all may strive in the earlier words of the precept to eschew evil and do good, but not only can peace, absolute and whole, never be attained,

it can never even be approached. The form of the struggle and its rapidity can alone be changed. Among mankind race may exterminate race by fire and sword, by drink and disease, or by the slower cruelties of competition in its countless disguises. The struggle is the same and will continue in the same perennial course while men increase and multiply upon the earth. When therefore schemes for universal peace are earnestly put forward, observers of nature listen but are not misled, for they recognize, as enthusiasts commonly do not, that though wars may cease, struggle and competition go on.

With the cessation of war we are told that each nation will be free to develop, in President's Wilson's phrase, 'unhindered, 'unthreatened, unafraid.' To the biologist the substance behind these words is illusion. And yet which of us that has human imagination and feeling would not seek to abolish war?

War brings to men agony unequalled in volume and intensity by the secular sufferings of peace prolonged through ages; in war the devil that each of us hides in his heart is loosed in frenzy, driving honest men to commit crimes atrocious and unutterable, of which in sober health they scarcely know the names. The 'calm, kind years, exacting their accompt 'of pain' we must all bear. The destiny of man is hard and he must fulfil it. Nature has laid on him her curse; he need not summon fiends from hell to multiply torture in its execution.

In time of war truth must be suppressed or garbled; history rewritten; the standards of candour and generosity suspended. To glorify our own virtues and to hide any that our enemy may have, conduct by which we used to recognize the cad, is no longer indecent, but, as it seems, incumbent on us all. No nation in modern times admits that it fights for an ignoble motive. Duty and Liberty draw armies forward, but there are divinities with titles less noble whose sinister forms hover in the rear. Sympathy for the oppressed seldom culminates in war but for considerations which commercial and geological maps reveal.

Those are foul accompaniments of war of which all are conscious. There are others which men of science know to be scarcely less hateful. War is the very opportunity of evil. The common and the base rise; thought, art, science, the high things of the mind are put aside, forgotten. The

continuity of learning is threatened. The closing of the public museums and galleries in England fitly typified the general contempt of the community for the intellectual life. Surely men of science have cause to be haters of war.

It is possible to realize these facts without in the least degree sharing the pacifist creed. The duty of self-defence is one which no government can decline. Such a duty fell upon our Government in 1914. For the climax then reached the world had been long in preparation. To have averted that catastrophe the policy of nations must have changed its course long years before.

Few students of history can feel sanguine that it is in the power of the rulers and leaders of men, be they kings, statesmen, philosophers, or men of science, to avert similar catastrophes in the future. Nevertheless there are courses which may be tried. The statement is sometimes made that from the principles of biology it is evident that wars must recur; that this deduction follows from scientific premisses, chiefly the fact that population increases more rapidly than the means of subsistence, and therefore that all attempts to abolish war must be in vain. Such pronouncements display a certain confusion of thought. Recognizing, as we all do, that the struggle for existence must go on, that it is not in the power of any individuals or communities by mutual agreement or statesmanship to contract themselves out of that struggle, or in any way to protect themselves from it, there is nothing in known biological fact which justifies the assertion that the struggle must periodically take the special form of war. War is the acute and spasmodic conflict between nations, or more correctly between *States*: a phase indeed of the struggle for existence, but not an essential manifestation of that phenomenon.

For example, since war is the conflict between States, it could be abolished in the limiting case in which the world were stably governed as a single State. Scientific men, whose studies necessarily have given them a sense of perspective in regard to time and space, will not agree that the conception of the world as a single State or unit is chimerical or incapable of realization. Indeed, of the possible future developments of civilization, we may regard the idea of a World-State as one of the least improbable.

There are several ways in which this unity may come to pass. One method by which it might be attained has been already prominent in the public mind. It might be reached by the assumption of the whole terrestrial power by a single State. For an approach to universal peace so established and maintained, the Roman Empire offers an obvious parallel. Notice further that in a contracted world the chances of stability of a State conterminous with the globe are vastly increased. Holding the laboratories, arsenals, and electrical communications, a resolute, unscrupulous, and dominant State, having once firmly grasped the hegemony, might quite conceivably enforce peace for an indefinite period, perhaps as long as coal lasts. That some such dream as this was in the minds of an important section of the German people is fairly certain.

The League of Nations is offered as a preventive. That is a lawyer's remedy. Confidence in that remedy is strongest in those whose acquaintance with racial physiology is least. It is not among those who are accustomed to rate the soundness of ideas according to their consonance with natural fact that enthusiasm for the League of Nations will be found. Philosophers have declared that men are born equal. The naturalist knows that statement to be untrue. Whether we measure the bodily or the intellectual powers of men we find that the inequality is extreme. Moreover, we know that the progress of civilization has resulted solely from the work of the exceptional men. The rest merely copy and labour. By civilization is here meant not necessarily a social ideal, but progress in man's control over nature.

As between individuals, so between nations there is similar inequality. When even in Europe we observe that there are teeming populations which have scarcely made any significant contribution to art, learning, or science throughout their history, we perfectly appreciate the meaning of that fact. We know how to deal also with the exceptions which believers in equality may adduce. If I see a red mangold in a field of white Prizewinners I know that its colour came from a red variety, such as Golden Tankard, or Golden Globe, and that the plant is probably only a first cross. We are prepared therefore for the analogous fact that Copernicus, classified as a Polish astronomer, had a German mother, and that the father of Chopin, Polish composer, came from Lorraine.

When we find proletariat nations producing genius of the highest kinds it will be time to reckon them our equals, but we are about as likely to see that time as we are to see a blond Japanese. There are proletariat races as there are proletariat families, and their redemption does not lie in statesmanship. The unequal distribution of illustrious men among the nations is a biological fact. France, Great Britain, Italy, Germany, and some smaller groups have since the revival of learning contributed many men of the magnitude we have now in mind. Some have excelled more in special arts or sciences, as for instance in painting, music, literature, astronomy, chemistry and physics, biology or engineering, but in a wide view of these manifold excellences there is no obvious disparity to be noted between those nations. Besides the 'illustrious' persons, each of the nations named has produced a vast number of men who have reached far above the degree which Galton defined as 'eminence,' seeing that the value of their work has been admitted universally. If they are reckoned, the inferiority of the proletariat nations becomes still more manifest; but since the performances of the eminent cannot always be distinguished from imitation, we are on safer ground in foregoing reference to them. The argument indeed founded on the distribution of the illustrious is so overwhelmingly convincing that further testimony is superfluous.

If we needed other indications of the relative powers of the nations, we find it in the fact that where the distributions of races overlap, the same races from which the 'illustrious' and 'eminent' are derived become masters and foremen, while the proletariat races remain labourers and factory hands.

These considerations make it most unlikely that nations dissimilar in intellectual attainments can co-operate in a League on equal terms. Nor can we confine our outlook to these nations of Europe. The nations of Asia and Africa must also be represented in the League. Disparities still more fantastically great will then be introduced. For there again we find the same disproportionate performances, China and Japan with a record in art—not to speak of science or letters—that Europe has seldom equalled and never surpassed, side by side with hordes that have not only produced nothing memorable of their own, but are scarcely even capable of successful imitation. But all have, we are told, 'equal rights.'

That they may have, but if it be so, there the equality is likely to end. Democracy, the system which confers equal political power on individuals, in defiance of genetic inequality, may, by foregoing that material progress which we know as civilization, produce a phase of spurious equilibrium, the equilibrium of chaos and disruption, but the natural instability caused by the fact of physiological inequality is not unlikely to produce, as heretofore, its recurrent effects.

The contemplated League is a democracy of nations, and every consideration, drawn whether from science or common sense, which raises doubt as to the supreme virtue of democracy in the single State, applies with special force to the case of a democracy of nations. Democracy is the combination of the mediocre and inferior to restrain the more able. As Prof. Flinders Petrie in a brilliant essay * lately showed, democracy has been the final phase of each great civilization. It may be an inevitable part of the physiology of nations that this phase should be reached, but the period of democracy is one of decay.

> ' Young boys and girls
> Are level now with men ; the odds is gone,
> And there is nothing left remarkable
> Beneath the visiting moon.'

In such a lethargy, approaching absolute zero of the mind, after the proscriptions—that *Ausrottung der Besten*, as Seeck well called this ancient Bolshevism—the Roman Empire died.

Admittedly, however, the conditions of the modern world are different. In the older epochs each new period of civilization began by invasion from without. In the modern world, contracted in time and space, such new invasion can scarcely occur ; and could a democracy of nations be indeed once firmly established civilization may perhaps enter on a period of decay from which there will be no revival until coal is exhausted.

But in truth there is little cause to dread that when the pressure of a common enemy is removed the nations will restrain themselves for long by such a League. From the moment the League is instituted national consciousness will be still further stimulated, a condition little likely to promote peace. Seeing that the delegates to the League are

* ' The Revolutions of Civilization.' Harper Brothers. 1912.

not simply to be drawn from all nations but are to be sent into conference expressly as *representatives* of their several nations, the first consequence of the formation of the League must be to make prominent and to perpetuate that special form of the struggle for existence which arises between national units, of which war is the direct and immediate result. By the nature of the case men of spirit and ambition will be sent to this parliament of the world, and quarrels will be bred, points of honour raised and exacerbation ensured, which but for the existence of such a court might perhaps have slept or died away.

Wars in the modern world are made by the awakening of national sentiment. National spirit has ebbed and flowed. After a period of abatement during which men's thoughts had turned rather to the common interests of nations than to their separate ambitions, the evil spirit of nationality has swept through the world.

Like all movement in human affairs, that spirit is roused from quiescence by the force of individual minds, in various countries, acting and re-acting on each other. Among many such influences may be mentioned two that have been conspicuous. In the year 1834 were born two historians. Treitschke in Germany and Seeley in England, to whose writings perhaps more than to any other concrete incident may be traced that inflammation of national spirit which brought about the consequences we have been witnessing. We may note in passing the curious circumstance that in the 'Expansion of England,' published in 1883, there should be never a hint or suspicion that the imperial sentiment which Seeley strove to excite would lead to a struggle with Germany. Russia is often named as an obvious source of danger ahead, and the possibility of friction with France is not forgotten. To those who are young there seems perhaps some natural predestined fitness in the present grouping of the nations. They should remember that only thirty-five years ago national friendships and hatreds were very differently apportioned. So transient are those emotions which now appear inevitable and permanent. Upon Seeley in this country followed Mr. Chamberlain, and upon Treitschke in Germany followed the ex-Kaiser with of course a host of others, fosterers of ambition and hatred.

Men of science, whose calling familiarizes them with epochs,

whose measure of achievement transcends the reckonings of statesmen, judge greatness by another scale. We have our units and the laity have theirs. Seldom even are the two estimates commutable. Weighed by our standards a man is great, not according as he has succeeded in influencing the ephemeral destinies of some artificial group on whom the lawyer has conferred the title of a State, but rather as he has extended thought or penetrated new provinces of knowledge. We speak sometimes of science, art, and letters as an international domain. More truly we should think of them as *extra-national.*

Could the thoughts of men be turned, if only a little, away from the national towards the *extra*-national things, in such a change would lie the best hope of the world. Ultimately, as Lord Robert Cecil lately said, even if a League of Nations is in being, public opinion is the only force which can be invoked for the execution of its decisions. Public opinion can only be altered from above. It is for men of science, and for their brethren in the arts and letters, to lead. Public opinion has strange laws of growth, little understood as yet. Under influences which would repay analysis, the last fifty years have been a period of deterioration and of lowering in public ideals. The ascent may be less easy. Yet it is comforting to reflect that in private manners we have in the same period advanced. It *was* public opinion which abolished slavery in the West Indies, overcoming vast financial interests. It might be impossible for Wilberforce and Clarkson to carry such a reform at the present day, but it *is* public opinion that has suppressed public cruelty to animals and children during our own lifetime, and when a few years ago men suddenly gave up the habit of spitting in railway carriages, they changed their manners not for fear of a forty shilling fine but at the bidding of fashion. The force of imitation, once developed, binds all but the rare exceptional men, and normal man, being almost incapable of independent thought, once bound by fashion is as powerless to escape as the hypnotized subject to resist the commands of the mesmerist. If the powers of the school, the church, and the press were exerted to interest the world in extra-national things, as they have been exerted to inflame national ambitions and to glorify war, the public opinion we long for may yet be created.

We have seen something of the resistless power of propaganda, the greatest political invention of our age. Those who control the press and the cinema can now in a few years inoculate the mass with any requisite opinion, whether poisonous or prophylactic. Democratic governments, intending a course of action, do not in modern conditions offer that measure directly. They prepare the way for a while by propaganda, judiciously exhibiting selected materials, arranged and timed to appear so as to produce a desired effect upon the passive minds of their populations, who presently find themselves, of their own mere motion, as they imagine, thinking what they were meant to think. If national leaders are sincere in their professed desire to abolish war they must proceed by this propagandist method, and they might then perhaps be successful. Simply to inveigh against war is as futile as to set up a League of Nations. The European races have no primary or instinctive dislike of war, nor is it probable that they can acquire that instinct. Though the horrors of war be depicted with the superhuman force of Goya—beside whose terrific records contemporary cartoons are merely insipid —public opinion is not in any way disturbed or deflected. To form a public opinion unfavourable to war other and more positive images must be presented. The public mind must be turned to other thoughts and especially to objects which contribute to establish a sense of perspective and proportion.

Our children learn of kings and of battles, but of the stupendous extra-national events that have made the world almost nothing. The names of the great pioneers, the discoverers, and the things they have done, of what races they were, and how, though separated by nationality, each has built on the work of the rest, these are the things that history should teach. The historian confesses that Newton was a greater man than Harley, but he still accepts Harley as the central figure of the reign of Anne.* Why do we suffer this abrogation of all value and proportion ? It may be right to remember that 1848 was a year of political upheaval, but surely it is a date transcending in significance every other in the century, for in that year Pasteur made his first discovery of the properties of asymmetrical crystals, out of which grew the whole science of bacteriology, modern surgery, very

* See ' Expansion of England,' Lecture 1.

largely modern medicine, and other discoveries, unrolling in endless series. Does some one say that the minds of common people cannot be made to see the size and meaning of such an event, and that Waterloo makes a more moving picture? Low as may be our estimate of the common man, we can fairly rate him higher than that. We need the help of the writers and the poets. What epic theme of Titans or of blood can stand in grandeur beside the story of Promethean man, tearing their secrets from the elements, building, bit by bit, by his genius and toil the dazzling fabric of knowledge by which he shall surely scale the heavens? That is our *Paradise Regained.*

Wars may decide the destinies of nations; short of extermination they do not decide the destiny of man. 'The splendours of the firmament of time may be eclipsed but are 'extinguished not.'

And just as science is an extra-national possession, so is great art. Shakespeare, Beethoven, Rembrandt, Raphael, and the rest, the poets and the artists who have seen deepest into the heart of man, the makers of beauty, the creators of delight, the pioneers of emotion; in them shall all nations of the earth be blest. Their calm and mighty works soar eternally beyond the noises of temporal ambition, high above the plane on which the nations grapple. In their presence the voices of the partisans are hushed.

Who would not that his name should stand however low in this catalogue of the immortals? What honour can national pride offer that is fit to be compared with theirs? To put one's own nation above others for a while, awaiting its inevitable deposition at the hands of other patriots, is this really a high aim to set before our youth?

What is nationality that it should claim our devotion? That conception, primordially attaching to homogeneity of race, has plainly now no such exclusive meaning. We know how 'from a Mixture of all Kinds began that Het'rogeneous 'Thing An Englishman,' and yet 'Your Roman-Saxon Danish-'Norman English' are conspicuously a nation. If we travel through Provence we find a people with marked physical and mental characteristics, so well defined that we recognize a *méridional* immediately, wherever we meet him. But when we are in Normandy we are surrounded by a type as distinct as possible, distinct in appearance and with a wholly different

outlook on life. Yet both are good Frenchmen, though the Norman has in him a good deal more of the Teuton, both of his virtues and his vices, than perhaps he cares to acknowledge.

If we inquire what does constitute a nation, we soon find that neither common racial origin, nor identity of language, or of religion, or of manners is essential. The most acceptable definition is probably that which declares that people compose a nation when they feel themselves to be a nation. But if we next ask how they come to share this feeling which has no necessary dependence on genetic relationship, on collocation in space, or common language, or common customs or beliefs, the answer is by no means obvious. National sentiment is a phenomenon of 'polarity'—to use Tarde's ever-memorable expression—a compulsion under which a congeries of dissimilar elements can be controlled so as to point in one direction. It is in the power of those whom we call patriots, to give them their more noble style, thus to polarize the peoples. In their wake follow the journalist, the contractor, and the manufacturer of armaments. The scene is set. Catchwords are chosen, insults bandied, and the play begins.

Feelings closely analogous are not rarely aroused among purely chance associations of persons. The boys of a school or a particular boarding house, men forming the 'class' of a University year, the crew of a vessel, owing their juxtaposition to the whims of guardians, the year of birth, or the vicissitudes of employment, are constantly liable to these blind emotions, often displaying them in their most violent forms.

Such instincts of coherence—for they are little more—have perhaps less of reasonable foundation than any others to which man is subject. They reach their highest development in men whose knowledge and experience is most limited, and are no more commendable than the instinct which compels a dog to fly at a stranger, however amiable, in imaginary defence of a master, however bad, a service he is equally ready to perform in a few weeks' time for anyone else who may happen to buy or steal him.

It is possible to be convinced that our country is the best in the world without ever leaving our homes, without acquaintance with any language but our own, or reading anything but the newspapers, and some of the most unshakable judgments

as to the respective merits of European countries are based on twenty years in India, reinforced by a few weeks in Swiss hotels or a visit to the Moulin Rouge.

Nationality therefore is a sentiment, picturesque and within limits laudable, yet in its essence accidental and ephemeral, capable of being turned to effects, attractive so long as they last, but impermanent, adding nothing to *universal* good, and commonly a pretext for the grossest forms of selfishness and cruelty. Transitory as the fruits of patriotism must be, it is pathetic to observe that this force is especially invoked by the nations in their pitiful striving for terrestrial permanence and immortality.

This emotion acted on the German mind in working up the passions of which the war was begotten. A year or two before the outbreak, a very patriotic but thoughtful German expressed this feeling to me. He said that wherever his countrymen settled they lost their language and national habits. Not only did this happen in England, Australia, or America, but also in Russia and even in Bohemia. If the process continued, he sighed, in a few generations there would be relatively little representing the German tradition on the earth—a thought he could not bring himself to face.

Surely one must have great confidence in the excellence of one's own ways to wish them permanently riveted upon the world. But however we may attempt to bind posterity, neither we nor our habits *will* persist even for periods which in the short view of the vulgar can be accounted long; and melancholy as the thought may be to the self-centred, we may be assured that in a few hundred years the language, the manners and customs, the ideals even, and all that we regard as distinctive of ourselves *will* have given place to others that we should not recognize as ours. Biology and history alike show that all this transformation by mere lapse of time must come to pass even in our own lineal descendants, apart altogether from the process of racial replacement or infiltration by which in former ages more abrupt changes were effected.

Let us consider what we know of this phenomenon of lineal, physiological descent. It is pleasant to remember that we are the countrymen of Shakespeare or Newton, but when we

base a claim to predominance in the world on such relationships, how much of that claim is substantial and how much idle vanity? With the discovery of genetic segregation the facts wear an aspect different from that in which men have been wont to see them. Where a few families of similar type have intermarried from time immemorial, a strain sensibly homogeneous may exist, and the members of the community may be so much alike that each generation does approximately represent the preceding in physical characteristics and aptitudes, so that they can feel a common pride in their successes and a common shame in their failures. Such homogeneous communities existed in many places up to the modern era of constant travel. They may still exist in places where communications are restricted—for example, in some of the secluded valleys of Yorkshire. But nothing of the kind is now true of the population of any West European country as a whole. In various degrees the chief nations are all mongrelized, and we English are probably the most mongrel of all. It must be added that to this physiological fact some of our national efficiency is largely due, partly because much differentiation of type means great variety of aptitudes, an essential to a large industrial community, but also because—as there are grounds for believing, though the point cannot be developed here—in special cases cross-breeding even in mankind does contribute to vigour. The fact, however, which most needs emphasis is that by the workings of the phenomenon of genetic segregation a man's children may possess few of the transferable ingredients which characterized him, his grand-children may possess none at all, and of his collaterals it is practically certain that few will contain so much of him that he need feel any personal satisfaction or humiliation in their performances.

When in these days a man claims that he is of a particular breed, say a Yorkshireman, he generally means little more than that his patronymic belongs to that race, or perhaps that for some generations his paternal ancestors lived in that part of the country. Unless he be of exclusive and immediate peasant origin it is improbable that he is in the genetic sense purely of one race. We are bi-parental, and since in each generation the mother's name is sunk, mixtures by intermarriage are soon forgotten; yet the female contributions

to the genetic make-up are at least as significant as those of the male. For example, I have a name common on the borders of Lancashire and Yorkshire. My father's father's parents were peasants of that country, but I know of at least four other racial contributions. It is already not more than an even chance that I contain any given ingredient of my father's parents. If I lived in Yorkshire I should be called a Yorkshireman, but genetically I should be no more a Yorkshireman than my father was a Welshman because two of his maternal great-grandparents were Welsh. In all our urban populations and in many of those of other countries, pedigrees at least as composite are so common as to be almost normal. In a very large number, moreover, elements definitely exotic occur. Looked at coldly in the light of physiological knowledge, what is called the tie of blood is therefore in modern times exceedingly slender, and in all likelihood many of us contain no more of the elements that went to the making of Shakespeare and our English heroes than the modern Greek contains of Zeus or Phoebus, despite the frequent alliances which those deities contracted with the daughters of men.

The old notion of the unity of a population has no physiological meaning in our modern world. It is framed on the legal figment of the undying corporation, so prettily expressed by Sir John Davies :

> ' And so the ancestor and all his heires,
> Though they in number passe the Stars of Heaven,
> Are still but one ; his forfeitures are theirs,
> And unto them are his advancements given.'

That is a picture applicable to none of the polymorphic human societies.

The real and solid fact that does emerge from the study of pedigrees is that certain races have exhibited the sporadic property of being able to produce genius, while others have done so not at all or to a relatively small degree, and occasionally in their crosses.

The substitution of true ideas of heredity and of the biological structure of societies must therefore contribute something, if ever so little, to weaken the conviction that national sentiment is a proper and natural extension of normal

fraternal affection. Confusion between pride of race and national pride is not unnatural in the ignorant, and has been constantly fostered by publicists; but when once the two are clearly distinguished we realize that, slender as may be the grounds for pride of race in any given individual, those for pride of nationality are illusory. Moreover, a well-informed public opinion will recognize that such pride of race as is derived from the production of the higher types of genius is shared by many races.

I look for no rapid change. It has taken more than two generations to bring national spirit to its present heat. The creation of an extra-national public opinion will take longer.

Observe that the suggestion here made appeals to definite human instincts—the love of imitation and the craving for approval—which have again and again prevailed in competition with more elemental forms of selfishness. The struggle for existence goes on. Men will remain greedy as before, but the special forms of collective greed which make for war may be controlled.

Let extra-national progress be recognized publicly as the highest and as the one indisputable good, in which all may share, and let it be known that, in comparison, national pride is small and trivial, and so palpable a truth may not impossibly spread among the leaders of men. Fashion will do the rest. Those who contribute to extra-national advancement are certainly in all ages few, but though separated in time and space *they* truly have ingredients in common. The bond which unites them is a thousand times more real than that which unifies a modern nation. If *their* collective consciousness could be awakened, as that of each separate nation has been, it might constitute a definite force for the direction of public opinion. Truth and beauty, science and art, wisdom and loveliness, these are extra-national possessions—they are the only aims which in the long run are worth pursuing. They are the treasures whose glory cannot pass away.

Reformers know that the only means of redeeming the criminal or the vicious lie in distraction—in changing the current of their thoughts. In the same way if the strength and gifts of those who would form an extra-national league were earnestly put forth in all their manifold forms, the

thoughts of men might be turned into a new current, and a public opinion might be aroused that would not merely in silence look on war as an evil, but might fix a stigma of shame on those who promote courses leading to war.

It is curious to reflect that the medieval church did at times exert an extra-national authority somewhat analogous—not indeed for the repression of war but for the enforcement of high standards of conduct. The analogy doubtless is not complete. For when Gregory VII. made the Emperor Henry wait, under sentence of excommunication, shivering in his shirt in the yard at Canossa, he was exerting an irresistible force—superstition—to which we cannot now appeal. But though we are no longer able to invoke hell-fire, there are pains more concrete that men really fear.

To stand well with their fellows, and especially with those whom they regard as their superiors, is a motive that appeals even to stupid and selfish people. If the fomenter of national ambitions, instead of being praised as he now is, were made to feel that he is a mischief-maker, one of the worst enemies of mankind, that in the judgment of the wise he is vulgar, an object of contempt, a hindrance to the progress of the world, we might see an advance towards the abolition of war more rapid than pessimists imagine.

If some one declares, as he may with truth, that though sixty or seventy years ago the extra-national ideals of art and science had taken a place in public esteem higher than that they now hold, they were soon, nevertheless, displaced by the ideals of trade and nationality, and that this sequence will recur, I would reply that I have a better hope, and for this reason. Science has introduced two new conditions. First, by its own operation, it has caused the earth to shrink so that a unity of public opinion, once created, can now be maintained which in the time of our grandfathers would have been impossible. But the second and prodigious new condition is the growth of science itself, then a doubtful wonder, now risen to majesty and volume all-enveloping, humbling the vanity of nations. Size tells at last. The magnitude and cosmic scope of natural knowledge stand revealed; and, gazing into that deep perspective, men will behold their pride in true proportion.

W. Bateson.

THE FATHER OF BOTANY

Landmarks of Botanical History. By Dr. Edward Lee Greene. Smithsonian Miscellaneous Collections. Washington. 1909.

WE do not generally recognize that the science of botany goes back for its source, not to the sixteenth century herbalists, but to the School of Aristotle from whom they copied. In fact it may be said that the seventeenth century botanists took up the science where Theophrastus left it two thousand years before. He was the true father of botany, or, in the phrase employed by Dr. Edward Lee Greene in 'Landmarks of Botanical History,' 'the protobotanist.' In the earlier years of the Roman Empire his botanical treatises were evidently standard works. Pliny and Dioscorides were content to go to them for descriptions of plants; Galen, Athenæus, and others quoted freely from them. At the revival of learning Theophrastus received a full share of attention. A Latin translation of his botanical works was published by Theodore Gaza in 1483. Scaliger Salmasius and the botanist d'Aléchamps were amongst those who applied themselves to his difficult Greek. Dutch scholars elucidated or encumbered his works with their erudition.

Theophrastus was born in 370 B.C. at Eresos in Lesbos, the island of Sappho and Alcaeus. At an early age he went, it is said, to Athens and there became a pupil of Plato. One may reasonably guess that it was from Plato that he first learnt the grand principle of 'classification' which runs through his works. He had for fellow-pupil Aristotle, his senior by fifteen years, who subsequently became his teacher on Plato's death. But the relation between these two seems to have been less one of disciple and master than one of intimate friendship on terms almost of equality. Aristotle's life of portentous industry and marvellously varied achievement closed at the age of sixty-three, when Theophrastus was forty-eight. It is said that Aristotle bequeathed to his friend two very important possessions, his library, including the manuscripts

of his own works, and his botanical garden in the Lyceum. Probably it was in this garden that Theophrastus made the notes for many of his descriptions of herbs and trees. He in turn, if we may accept as authentic the will which his biographer Diogenes Laertius has preserved, made careful provision for the maintenance of this botanical garden after his death by bequeathing it as a common possession to certain friends who are named. The will gives directions that he is to be buried in the garden without extravagant expense; it appoints a custodian and provides for the emancipation in due course of various slaves employed as gardeners.

According to Diogenes, Theophrastus survived Aristotle nearly forty years, dying at the age of eighty-five, viz., about 285 B.C. His experience of life had been considerable. He may have heard as a boy of the death of Epaminondas; he had known personally the two greatest masters of ancient thought; he had watched most of the career of Philip and the whole of that of Alexander; living through the troublous times which followed the death of the great conqueror and the dismemberment of his kingdom, he had enjoyed the patronage of Cassander and of Demetrius 'the besieger of 'cities.' A life which opened when Thebes was chief among the Greek independent states closed when Pyrrhus of Epirus was beginning to threaten Rome. Yet we are told that this never-wearying student complained, 'We have to die just 'when we are beginning to live.'

Another pupil of Aristotle was Alexander the Great, who took with him to the East a number of scientific men. It is probable that Theophrastus had access to the reports of their observations, for his descriptions of plants include such exotics as the cotton-plant, the banyan, pepper, cinnamon, myrrh, and frankincense. His observations in fact from various sources extend from the Atlantic to the Chenab.

Diogenes gives the titles of no less than 227 treatises ascribed to Theophrastus covering almost every conceivable subject. We can well understand that Aristotle gave Theophrastus a character for exemplary diligence, and handed over the School to him when he retired to Euboea. The biographers record that he was an admirable lecturer: as an old English compiler renders the gossip of Athenæus, 'He taught school in a neat 'genteel habit, endeavouring always to humour his harangues

' with gestures proper for the subject ; insomuch that one ' time, haranguing upon gluttony, he lick'd his lips.' Some of the sayings attributed to him, if not indisputably authentic, are at least in character : as ' Nothing costs us so dear as the ' waste of time ' ; ' One had better trust an unbridled horse ' than an undigested harangue.' All Athens, we are assured, attended his funeral out of the respect which men had for his character.

Of the mass of literature ascribed to Theophrastus we possess but a fraction. There are many fragments, some of considerable length ; the botanical works are two, namely, the Enquiry into Plants in nine books, and the Causes of Plants in six. Of these the former treatise is the more considerable, and seems to contain all the material important to the historian of botany. The Enquiry into Plants appears to be a collection of lecture-notes, whether those of the professor himself or of one of his pupils. The Greek is terse and vigorous enough, and sometimes epigrammatic, with the crispness of Aristotle himself. But the Lyceum was not the Academy, and no one would read either Aristotle or Theophrastus for sheer enjoyment of the language. It is for their interest as a chapter in the history of science that the contents of the Enquiry are here reviewed.

When we recall how the first question which the herbalists asked about a plant was ' What is its use to man ? ' it is startling to find that with Theophrastus the economical aspects of his investigation are only of secondary importance. The ninth book of the Enquiry is indeed mainly economical : but its authenticity is open to question on the evidence of style and method, and it is after all but a sort of appendix to eight other books whose aim is in the main a collection of facts of nature apart from their relation to human needs. Of course, when the author distinguishes kinds of timber, he points out for what human purposes each kind is appropriate ; and it is remarkable how he records the taste of countless things which it perhaps would not have occurred to us to taste at all. Also in dealing with such classes of cultivated plants as cereals and pot-herbs, he naturally thinks of them in relation to man. Yet his first book clearly shows that such considerations are only incidental to his enquiry. His main object is differentiation : everything is described by comparison

with something else. 'What are its "differences"?' is the characteristic question which he asks throughout. Nor does he always feel bound to arrive at a dogmatic answer to his own questions. For him scientific value lies often rather in the clear statement of a problem than in its solution; he was mindful perhaps of his master's saying: 'It is useful 'for those who wish to solve a difficulty to have realized 'that difficulty adequately.'

Again, as Theophrastus is free from the 'economical' bias of the herbalists, so is his attitude remarkable towards the superstitions which attend man's early investigations into nature's ways. Where he finds that a plant has such associations about it, he records the fact, since it has its place in an enumeration of what is known or said about that plant; but he reserves his own opinion with true scientific caution. Thus he writes of cummin: '*They say* that one should curse 'and abuse it, while sowing, if the crop is to be fair and 'abundant:' * and he alludes to this saying again in a passage which well illustrates his attitude:

'We may add statements made by druggists and herb-diggers which in some cases may be to the point, but in others contain exaggeration. Thus they enjoin that in cutting some roots one should stand to windward, and that one should anoint oneself with oil: for that one's body will swell up if one stands the other way. Also that the fruit of the wild rose must be gathered standing to windward, since otherwise there is danger to the eyes. Also that some roots should be gathered at night, others by day, and some before the sun strikes on them, for instance those of the plant called bear-bind. These and similar remarks may well seem to be not off the point: for the properties of these plants are hurtful: they take hold, it is said, like fire, and burn: for hellebore too makes the head heavy, and men cannot go on digging it up for long: wherefore they first eat garlic and take a draught of neat wine therewith. On the other hand the following ideas may be considered far-fetched and irrelevant: for instance, they say that the pæony should be dug up at night: for if a man does it in the daytime and is observed by a wood-pecker while he is picking the fruit, he risks the loss of his eyesight. . . . That one should be bidden to pray while cutting is perhaps not unreasonable: but the additions made to this injunction are absurd: for instance, as to cutting

* The version of passages of the Enquiry in this article are from my translation, recently published by Mr. Heinemann in the Loeb Classical Library.

the kind of all-heal which is called after Asklepios : for then it is said that one should put in its place an offering made of all kinds of fruits and a cake : and that, when one is cutting gladwyn, one should put in its place to pay for it cakes of meal from spring-sown wheat. And many similar notions are mentioned. Thus it is said that one should draw a circle round mandrake with a sword, and cut it with one's face towards the west ; and at the cutting of the second piece one should dance round the plant and say as many things as possible about the mysteries of love. . . . These notions then seem to be irrelevant, as has been said.'

This guarded attitude seems very far in advance of the simplicity of our forefathers. It is interesting to note, by the way, how the mandrake legend grew : that fearsome herb is not yet endowed with a human shape and the power of vocal protest against its deracination, though the ' druggists and ' root-diggers ' had already invested their callings with a certain perhaps not unprofitable mystery.

In the ninth book, which is largely concerned with the medicinal properties of plants, we obtain a glimpse of the ' Doctrine of Signatures,' so largely developed many centuries later by Paracelsus :

' Some roots are of peculiar shape, as that of the plant called " scorpion-plant " (leopard's bane, *Doronicum cordatum*), and that of polypody. For the former is like a scorpion, and is also useful against the bite of that creature and for certain other purposes. The root of polypody is rough and has suckers like the tentacles of the polyp (cuttlefish) : . . . if one wears it in an amulet, they say that one does not get a polypus (wen).'

Another ' scorpion-plant ' is mentioned later :

' Wolf's bane (*Aconitum anthora*), which some call " scorpion-" plant," because it has a root like a scorpion, kills that animal if it is shredded over him : while, if one then sprinkles him with white hellebore (*Veratrum album*), they say that he comes to life again . . . it is also useful against a scorpion's sting. . . . Now, if what has been told already about the scorpion be true, then other similar tales are not incredible. Indeed fabulous tales are not composed without some reason.'

This seems no unworthy attitude for a man of science to assume towards the mysteries of nature.

The treatise begins with a rather intricate discussion of the

question ' What is a part ? ' the object of which is to discover what are the essential organs of a plant : the author is to some extent hampered by the assumed analogy of plants with animals. He starts by making a distinction between permanent and ' annual ' parts which, as Greene points out, closely approaches the modern distinction between vegetative and reproductive organs, save that he classes the ' bud ' with the permanent ' parts.' He takes a tree, as being the ' most ' complete ' type of plant, and gives for his list—root, stem, branch, bud, leaf, flower, fruit. It is noteworthy that, though presently he has much to say of bark, he does not include it in this list : though equally conspicuous with the other ' parts,' it is not organic. The order in which the ' parts ' are enumerated is significant, and especially the fact that he begins with the root. The root-diggers may have first attracted attention to this part, but it is clearly not on economic grounds that Theophrastus puts it first. Indeed, when he comes to describe individual plants so that they may be identified, he puts the root last in the series. And there is plenty of evidence that he appreciated its importance. Thus he says, ' The roots of all plants seem to grow earlier than the parts ' above ground ' : he distinguishes clearly between rhizomes, bulbs, etc. (fleshy roots), and roots proper (' fibrous ' roots) :

' One might question' (he says) ' if such roots (rhizomes, etc.) should be called roots. Inasmuch as they are under ground, they would seem to be roots ; but, inasmuch as they are of opposite character to other roots, they would not. For your root gets slenderer as it gets longer and tapers to a point : but the so-called root of squill purse-tassels (muscari) and cuckoo-pint does just the opposite. . . . It is not right to call all that which is underground root, since in that case the stalk of purse-tassels and that of onion and in general any part which is underground would be a root, and so would the truffle, the taro (*Colocasia antiquorum*) and all other underground plants. Whereas none of these is a root : for we must base our definition on natural function and not on position.'

It is worth noting that this was written nearly 2,300 years ago ! The ' natural function ' could hardly be given more succinctly than in the following definition : ' The root is that ' by which the plant draws its nourishment, the stem that to ' which it is conducted.'

Further Theophrastus paid particular attention to the root in studying the process of germination :

'The corn-like plants produce their root and their leaves from two distinct points, . . . the root growing from the stout lower part of the seed, the shoot from the upper part : but the part corresponding to the root and that corresponding to the stem form a single continuous whole. Beans and other leguminous plants do not grow in the same manner, but they produce the root and the stem from the same point, namely the point at which the seed is attached to the pod, which, it is plain, is a sort of starting-point of fresh growth. In some cases there is also a formation of peculiar shape, as in beans, peas, and especially in lupins : from this the root grows downwards, the leaf and the stem upwards.'

One or two other definitions of essential ' parts ' may be mentioned. The leaf he does not attempt to define, but he distinguishes what would now be called ' petiolate,' sessile,' ' opposite,' ' alternate ' leaves. Here is the conclusion of his discussion of the ' differences ' of leaves :

' To sum up, the differences between leaves are shown in size, number, shape, hollowness, in breadth, roughness, or their opposites, and in the presence or absence of spinous projections : also as to their attachment, according to the part from which they spring or the means by which they are attached : the part from which they spring being the root or a branch or a stalk or a twig, while the means by which they are attached may be a leaf-stalk, or they may be attached directly ; and there may be several leaves (viz., leaflets) attached by the same leaf-stalk.'

As to this last observation he remarks elsewhere that the whole compound leaf, and not the leaflet, must be taken as the unit and called the ' leaf,' since it ' all falls at the same ' time ; ' the leaf-stalk must not in such cases be mistaken for a twig. The detailed descriptions of particular leaves are extremely careful and show an astonishing power of definition without the use of technical terms. He has indeed something which approaches a technical terminology, in that he appears to have selected the leaves of certain specially familiar trees which he uses as types of different leaf-outlines. Greene makes out four such types, viz,, the leaves of sweet bay, olive, pear, and mature ivy, corresponding to the modern terms lanceolate, oblong, sub-orbicular, ovate, and remarks that all these are ' entire ' and more or less ' coriaceous ' : the differences

between them are seen in the outline. When therefore Theophrastus is describing a leaf, he often refers it to one or other of these types, adding qualifications which distinguish it from the type. For example, he describes thus the leaf of the manna-ash: 'The leaves in shape are like those of the 'sweet bay (that is, the broad-leaved bay), but they contract 'to a sharper point, and they have a sort of jagged outline 'with sharp points.'

Theophrastus' account of the flower presents many points of interest, although of course he never suspected the part which the flower plays in reproduction and knew nothing of the existence of sex in plants. He did indeed know that the flower leads up to the seed, but he had not grasped the fact that there can be no seed without antecedent flower (on the reproductive processes of cryptogams he is naturally silent). Nor does he recognize the 'flower' when it is inconspicuous. To him in fact 'flower' meant in general a flower with conspicuous corolla or calyx; most apetalous plants are to him 'flowerless.' Hence he does not describe the inner whorls; we find however this quaint account of a pistil: 'They say that in the citron those flowers 'which have a kind of distaff growing in the middle are 'fruitful, but those that have it not are sterile;' and the inner whorls are at least recognized in his account of what he calls 'two-fold' flowers: 'I mean by "two-fold,"' he explains, 'that the plant has another flower within the flower 'in the middle, as with rose, lily, and violet.' He notes that most flowers have the 'fruit-case' in the middle of them, but that in some it is in the top of the 'fruit-case,' as in apple, pear, etc.; that sometimes it is on top of the actual seeds, as in thistles, which have 'a flower attached to each seed;' and that in some plants 'the attachment is peculiar,' the flower being closely attached to the whole (viz., compound) 'fruit-case' and occurring 'in the middle part of the struc-'ture—except that in some cases it is not easily recognized, 'because it is downy'; the mulberry is an example. The expressive adjective 'downy' is his word for flowers, such as those of vine, mulberry, and ivy, in which what he calls 'leaves' are not obvious, but which he nevertheless recognized as flowers.

In the absence of any real comprehension of reproduction

an ancient account of seeds and fruits must necessarily be tentative. The interesting point about Theophrastus is that he studied and classified seeds and arrived at some not unimportant results. Thus he may be said to have invented the terms 'angiosperm' and 'gymnosperm,' and either Aristotle or he seems to have invented 'pericarp,' though the reader has to beware of taking these, or any other botanical terms which sound familiar, in their precise modern connotation. His 'pericarp' is the case, of whatever kind, which covers the seed, and includes all such coverings as pod, husk, shell, fruit-pulp; but, as Greene suggests, he would doubtless have classed wheat-grains simply as 'seeds' and would have called the chaff the 'pericarp.' He did not know (how should he?) where to draw the line between 'fruit' and 'seed': his list of angiosperms would include only a comparatively small group of the plants so provided; his example is the poppy tribe; and, though his gymnosperms included, not unnaturally, the umbellifers, he does not so reckon the conifers. In the concluding sentence of his discussion of the 'differences' in seeds we seem to hear a wise admonition as to the need of disregarding *size* in our estimate of the importance of things in nature. However one might find more such differences, 'and one should not ignore the most important of them, 'namely those which belong to the plant's natural character.' This idea, that each natural kind has an individuality of its own, recurs again and again. Equally characteristic is the hint that we are only at the beginning of the investigation, and that there is much yet to be studied and learnt. In fact it is a little tantalizing, when some specially interesting suggestion has been made, to be told, as Theophrastus repeatedly tells us, 'But this matter calls for further investigation.'

Nor is our author content to enumerate the obvious 'parts' or organs of a plant; he asks further of what these are composed, and so we get a rudimentary histology, to some extent hampered by the use of terms which belong properly to animals, though the author is careful to say that these are in some cases only applied 'by analogy,' and must not be taken to imply an exact correspondence between the structures of plants and of animals: 'Again there are the things of which such parts '(root, stem, etc.) are composed, namely bark, wood, core '(in the case of those plants which have it), and these are

' all " composed of like parts " (viz., are of homogeneous struc-
' ture) : e.g. though we call a part of a leg " toe," any part of
' wood is simply called " wood." ' ' Further there are the
' things which are even prior to these, from which they are
' derived—sap, fibre, vessels, flesh : for these are elementary
' substances . . . and are common to all the parts of the plant.
' Thus the essence and entire material of plants consist in
' these.' In regard to these constituents he observes that moisture and warmth are of primary importance; fibre (muscle) is defined as ' continuous, fissile, long,' and has no growth starting from it, whether at the side or in continuation of it, while ' vessels ' are ' longer and thicker, have side-growths ' and contain moisture; ' the distinction between ' wood ' and ' flesh ' is that the former only ' splits,' while the latter ' can be broken up in any direction, like earth and things made ' of earth.' ' Bark ' (which term he applies to the outermost covering of almost any part of the plant) ' is the outside and ' is separable from the substance which it covers; ' ' core ' is ' that which forms the middle of the wood, being third in ' order from the bark, and corresponding to the marrow in ' bones.'

Turning now from the classification of parts to the classification of the plants themselves we find a list remarkable for its simplicity and its common-sense; other principles of classification are presently introduced, but this is throughout regarded as the primary division: ' The first and most ' important classes, those which comprise all or nearly all ' plants, are tree, shrub, under-shrub, herb.' To elucidate this some part of the definitions must be quoted: ' A tree ' is a thing which springs from the root with a single stem, ' having knots and several branches; ' ' a shrub is a thing ' which rises from the root with many branches; ' ' an under ' shrub is a thing which rises from the root with many stems ' as well as many branches: ' ' a herb is a thing which comes ' up from the root with its leaves and has no main stem; ' and the seed is borne on the stem.' Examples of the four classes are olive, bramble, rue, corn. We are warned that we shall find some overlapping between these classes. ' Herb ' is a very comprehensive term, and covers even algæ and fungi, or even madrepores. Of course these four terms, along with others, were in popular use already, but with Theophrastus

they are for the first time made to cover fairly well defined provinces.

Sub-division of the four great classes does not proceed on rigid lines, but, especially among 'herbs,' there are tentative efforts at grouping, the principle being to take some common and conspicuous plant as a type and to group others with it; the idea is the same that we have noticed already in the classification of leaves. Thus we find herbs labelled as 'corn-' like,' 'ferula-like' (hollow-stalked), 'thistle-like,' 'chicory-' like,' 'chervil-like,' 'muscari-like' (bulbous): we have also such 'economic' groups as kitchen-herbs, cereals, pulses, aromatic plants, and coronary plants. These may not be of scientific value, but one likes to know what vegetables were grown by a race which was in the main vegetarian, and what flowers they admired and used to adorn their persons or houses. The list of coronary plants includes a certain number of wild flowers and also things valued for their scent or their foliage.

Besides the primary fourfold classification we have certain secondary classifications, which of course make cross-divisions. The chief of these are cultivated and wild, deciduous and evergreen, male and female, perennial, biennial, and annual, flowering and flowerless, fruitful and sterile, terrestrial and aquatic.

A modern botanist would of course begin with the wild forms. But we have to remember that domestication was not in ancient times thought of as an artificial development: it was taken for granted that the plants, like the animals specially associated with man, had always been so associated. Hence a large proportion of the plants noticed by Theophrastus are cultivated forms; indeed he remarks that 'most of the 'wild kinds have no names and few know about them, while 'most of the cultivated kinds have received names and they 'are more commonly observed . . . for, as many people make 'use of them, they are led to study also the differences.' He quotes however from Hippon, a philosopher and naturalist of the Ionian School, the striking remark that 'any plant 'may be either wild or cultivated, according as it receives 'or does not receive attention,' and at first he seems to accept this revolutionary doctrine; but he finds himself unable in practice to dispense with so obvious and useful a distinction.

He recognizes equally that the distinction between deciduous and evergreen is not absolute, since he is told that certain trees, which are deciduous in Greece, retain their leaves in warmer climates. And in fact the breadth of his view is well illustrated by his constant insistence on the modifying effect of climate, as well as of soil, position, and aspect.

The distinction between ' male ' and ' female ' has nothing to do with the modern recognition of sex in plants ; it is found, according to Theophrastus, most markedly in wild plants, and it was evidently an accepted piece of popular nomenclature. When it was observed that two trees or bushes, for instance rock-roses, had much in common, and appeared to be what we should call ' closely related,' but that one was larger or of robuster appearance than the other, this economy of names was practised : thus, to take the instance given, we may identify the ' male ' and the ' female ' rock-rose as *Cistus villosus* and *Cistus salvifolius* respectively. In many cases, no doubt, the distinction corresponded to that between fruitless and fruit-bearing : but Theophrastus is careful to tell us that some call the fruiting trees the ' males ' ; and he compares this distinction to that between wild and cultivated : it evidently had no very precise signification.

However, though innocent of all the modern fascinating lore of fertilization, he does notice that ' with dates it is helpful ' to bring the male to the female : for it is the male which ' causes the fruit to persist and ripen. . . . The process is ' thus performed : when the male palm is in flower, they at ' once cut off the spathe on which the flower is, just as it is ' and shake the bloom with the flower and the dust over the ' fruit of the female : and, if this is done to it, it retains the ' fruit and does not shed it.' He tells also at length of the process called in antiquity the ' caprification ' of the fig (from *caprificus*, the wild fig-tree). Though they were totally ignorant of the real meaning of what happened, and though they had probably never discovered that the fig has a flower, the ancients had observed that the wild fig ' produces ' gall insects, and that, if these insects perforate the top of the fig, it will swell and consequently will keep when stored. Wherefore wild figs, it appears, were hung on the cultivated trees to the benefit of the latter. A similar service was sometimes performed by insects produced in plants other than the wild

fig. One cannot forbear quoting the description given of this 'pseudo-caprification': 'They say that hulwort '(*Teucrium polium*) also, when it fruits freely, and the gall-'bags in the leaf of the elm are used for caprification. For 'certain little creatures are engendered in these also. When 'the *knips*' (I should be sorry to spoil this expressive word by translation) 'occurs in figs, it eats the gall-insects. It is to 'prevent this, it is said, that they nail up the crabs: for the '*knips* then turns its attention to these.' He is evidently explaining a familiar practice: one might well wonder if one saw a crab nailed up on a fig-tree what purpose it was intended to serve.

Dealing with the question of habitat, Theophrastus dwells in an interesting manner on the flora of particular regions, such as 'waterless Libya,' the Nile, and Lake Copais. The fullness of his accounts of such regions forces us to wonder what were his sources of information. There are reminiscences of Herodotus, but in general the impression one forms is that he is drawing on information obtained from contemporary authorities, whoever these may have been. As to Arabia, Phœnicia, Babylon, and the Punjab we know that he had the reports of men who had accompanied Alexander. May one surmise that these observers were men trained at the Lyceum and specially chosen to attend the conqueror, who was himself in some sense a pupil of the school? But who were the 'men 'of Macedonia,' 'the men of Mount Ida,' 'the men of 'Arcadia,' who supplied information as to regions nearer home? The mere collection of facts must, one would think, have been an important part of the work of the school whose leading representatives were able to tabulate facts about almost everything under the sun, from political constitutions to birds and fish. One may hazard the conjecture that the oft-repeated 'they say,' 'the men of Mount Ida say,' and so forth, represent the answers gathered by young peripatetics specially sent out to make observations and record them. At all events, it is more probable that such 'research students' were employed than that there were in existence botanical monographs by Macedonian, Idaean, or Arcadian writers. It is noticeable that sometimes the tense of the report is 'they said,' as much as to say 'they told us in answer to our 'enquiry.'

The strange variety of 'cuttings' over which Cicero, in his little treatise on old age, doubtless with the *De re rustica* before him, makes the elder Cato gloat, were all known in the time of Theophrastus: cuttings from stem or branch, root-cuttings, pieces with a 'heel' and so forth—they are all described; he tells what vegetables are only raised from seed, and which are increased by offsets. It is a little surprising to find that the Greeks grew plants in flower-pots and had something not unlike window-boxes. Theophrastus has much to say on watering, on manuring, pruning, on root-pruning, on the treatment known as 'punishing' the almond. His directions for rose-culture leave little for the modern rosarian to cavil at: 'As the plant comes slowly from the seed, men make 'cuttings of the stem and plant them. If the bush is burnt 'or cut over, it bears better flowers; for, if left to itself, it 'grows luxuriantly and makes too much wood. Also it has 'to be often transplanted: for then, they say, the roses are 'improved.' Sometimes the cultural process is more occult; as when we read that cuttings of the fig are planted in a squill-bulb. Yet less than a hundred years ago Sir Walter Scott (Journal, June 28, 1829) mentioned as a new discovery 'that the cutting of an apple-tree, or other fruit-tree, may be 'preserved by sticking it into a potato and planting both 'together.'

In whatever way the facts may have been collected, the Enquiry contains an extraordinary mass of miscellaneous but well-sifted information, such as it is difficult to conceive that one man could have collected, even if he had not written copiously on most other topics of human interest. Many of the facts are obviously based on first-hand observation; but in very many cases the writer makes it clear that he has not had the opportunity of verification, and in such cases he adopts the same attitude of scepticism (in the original sense of the word) which we have seen that he adopts in regard to the marvellous. Thus, to touch on superstitions of a rather different kind to those mentioned above, he does not refuse to believe that one plant may change into another, e.g. wheat or barley into darnel, yet he suggests that darnel may be simply a degenerate form of the cultivated cereals, or that the belief in transmutation may have arisen because darnel chiefly infests those crops—implying that it is something quite distinct. On the other

hand, he seems to have no doubt as to the possibility of spontaneous generation of plants, even as he unhesitatingly states that the gall-insects are engendered in the seeds of the fig. In this matter he is perhaps not much behind the uneducated opinion of the present day.

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THE ANGLO-NORMAN RENAISSANCE

1. **Le Mystère d'Adam. An Anglo-Norman drama of the twelfth century.** Edited by Paul Studer. Manchester University Press. Longmans. 1918.
2. **A General Sketch of European Literature in the Centuries of Romance.** By LAURIE MAGNUS. Kegan Paul. 1918.
3. **The Exchequer in the Twelfth Century.** By REGINALD L. POOLE. Oxford: University Press. 1912.
4. **The Oxford Book of French Verse, XIII. Century—XIX. Century.** By ST. JOHN LUCAS. Oxford: Clarendon Press. 1917.
5. **The Cambridge History of English Literature.** Edited by A. W. WARD and A. R. WALLER. Vol I. Cambridge: University Press. 1907.
6. **A Short History of French Literature.** By GEORGE SAINTSBURY. Oxford: Clarendon Press. 1897.
7. **England under the Normans and Angevins.** By H. W. C. DAVIS. Methuen. 1905.
8. **Gilbert Crispin, Abbot of Westminster: A Study of the Abbey under Norman Rule.** By J. ARMITAGE ROBINSON. Cambridge: University Press. 1911.

THE essential unity of French and English humanism, though it was never obscured by the internecine wars of successive centuries, was during the nineteenth century temporarily and partially eclipsed by what may be called the German invasion of England. The industry of German scholars in many fields, and notably those of theology, law, pure scholarship, and history, and the sudden upgrowth of a great German industrial system based on the unexpected scientific and economic developments of English and other scientific inventions, had almost overwhelming results. The meticulous industry and bold theorizing of German philosophers, scholars, jurists, economists, and theologians appealed with peculiar force to large groups of English thinkers, who in the mid-nineteenth century, rejoicing in the freedom of the new liberalism of the prosperous middle classes, were prepared to follow the Germans in the most unexpected directions amid familiar as well as recondite regions. The names of Goethe, Lessing, Schiller and Heine, of Kant and Fichte,

of Savigny and Niebuhr, had consecrated the age of *Sturm und Drang* and directed the eyes of Englishmen to Germany as the home of reason and intellectual freedom. Under the shadow of these great names the German invasion of England became possible. It is not intended here to trace the growth of the German influence, or its ultimately disastrous effects in many regions of thought, though it would be ungracious not to pay a tribute to the valuable accessions of actual knowledge in almost every field of research which England and the world owe to the tireless industry of German scholars. The habit of research in England was largely stimulated by the example of German workers, and it is not too much to say that the patient German accumulation of material has made many new advances possible. But German theories, whether in theology or in law, in history or economics, had begun before the end of the nineteenth century to show very disastrous effects in English intellectual and spiritual life. The German method of fitting facts to theories in every plane of thought was seriously injuring the national outlook on religion, on the evolution of law and economics, on the processes of history. Even before the present war the reaction had come, and Englishmen were beginning to rebel against an all-pervasive influence which in good faith and on good grounds they had welcomed half a century before. The intervening period had seen in Germany the logical working out in national life of these processes of thought, and we have at last realized with a shudder how nearly we too had been absorbed as a nation by those obsessions. That shudder has also passed across America, where the danger had been even greater than in a land permeated by the immemorial traditions of a far different humanism.

To-day we are coming to regard that humanism with newly awakened eyes. France and England have emerged from a dreadful age of *Sturm und Drang*, with its final testings of national character in a war such as time has not hitherto recorded, and both have emerged with a new outlook on the affairs of the spirit, that spirit which has marked the successive interactions of the French and English races. It is therefore not untimely to recall some of the aspects of the period when France and England under the influence of Italian minds became the great fountains of Western civilization.

Mr. H. W. C. Davis, writing in 1905, declared that :

'The inner significance of the Norman Conquest is the reverse of that which appears upon the surface. In one sense the Conquest ranks among the migrations ; but in a truer sense it is a result of the reaction against the influence of the barbarians. It marks the defeat in one corner of the West of the new order by the old, of the Teutonic conqueror by Latin civilization. The withdrawal of the legions from the shores of Britain marked the point at which the hold of the Roman Empire on the West began to be relaxed. When William landed at Hastings the wheel had come full circle, and the spiritual heirs of the Empire held within their grasp so much of the imperial inheritance as the Teuton had succeeded in guarding from the attacks of other rivals. When Harold fell beneath the Dragon Standard, the last stronghold of Teutonic law and institutions, of a liberty which degenerated into licence, of an autocracy who had outlived their function and their virtues, was opened wide for the entry of the Italian priest and Gallic legislator. . . . The spirit of the Empire still survived ; the craving for a visible and political unity of all civilized peoples, the instinct for administration, the legal subtlety, the capacity for self-restraint and for concentrating the faculties upon the pursuit of a distant object. While these remained, Rome remained, and a civilization not less complex nor less glorious than that which had been lost was still within the bounds of possibility.'

In these noble words Mr. Davis indicates the true significance of the Anglo-French tradition ; it is the continuity of the spirit of the Roman Empire.

The Gauls of the classical period were already endowed with literary power early in the first century, and not only were Roman manners and the civilization of Italy assimilated, but great schools of rhetoric and literature arose at Autun and Bordeaux, at Lyons, Toulouse, Nimes, at Vienne, Narbonne, and Marseilles. This literary tradition was well maintained, and in the fourth century Ausonius gave new life to the literature of Rome. Of his 'Mosella' Dr. Sandys writes : 'Apart 'from its purely original passages, which are inspired with 'a love of Nature striking a new note in Latin literature, the 'poem abounds in happy reminiscence, not of Virgil only 'but also of Horace, Lucan, and Statius.' Nor was his scholarship more exact than his observation. His description of the fishes in the Moselle enabled Cuvier to identify the fifteen species which he enumerates. More than a century later we find at Lyons Apollinaris Sidonius carrying on the literary

tradition. He is the connecting link between the age of Roman literature and that of Petrarch, and he shows us a land adequately equipped with learning at the moment when the German hordes were rooting out the traces of Roman and Celtic humanism from Britain. Dr. Dill and Dr. Sandys declare that Sidonius was the foremost of those who 'in a 'period of political convulsion and literary decadence, softened 'the impact of barbarism, and kept open for coming ages the 'access to the distant sources of our intellectual life.' The tradition and practice of Latin humanism lived longest in Gaul, and if Venantius Fortunatus, who died in the year 600, was the last of the Latins, yet even with him the Latin tradition did not die, since in the seventh century Virgilius Maro, the grammarian, marks the transition of the Latin tongue into the shadowy region of romance, into the first beginnings of Provençal music. Within a few years of his death the *Lingua Romana* is a living speech, and in the next century it begins to have a place in the history of literature which is approved by the most ancient monument of the French language, by the famous 'Serments de Strasbourg' of the year 842. But long before this date the first great interaction of England and France had taken place, and the monk Alcuin had been called by Charlemagne to his palace school at Aix-la-Chapelle to redress the ravages of barbarism.

The influence of the English Alcuin on the growth of the Anglo-French renaissance still four centuries away was endless. He created a tradition of teaching, and when he died at Tours on Whitsunday 803, it was no meaningless superstition that saw a glow as of fire shining above his monastery. A new spirit had descended upon the earth with that Whitsunday. Scholars and apostles carried far and wide the spirit of the teacher of Northumbria, of Aix-la-Chapelle, and of Tours. He gave to savage Germany in the person of Rabanus Maurus its first teacher. 'Historians,' writes Mr. C. J. B. Gaskoin, 'have long ceased to trace a dubious pedigree for the Univer-'sity of Paris through Reims and Fulda to the Palace School 'at Aachen. Yet it remains true that to the verge of the 'intellectual revival of the eleventh and twelfth centuries 'the Alcuinian tradition lingered on, passing from scholar 'to scholar, and illuminating, now in this quarter, now in 'that, the prevailing darkness.' Mr. Gaskoin traces the

apostolic succession to Servatus Lupus at Ferrières, to Heric of Auxerre, to Remi of Auxerre, Reims and Paris, to Odo of Cluny. Remi, who died in 908, was the first to hold a school at Paris. Two years after his death the monastery of Cluny was opened, and Odo of Tours, who became in 942 its second abbot, had attended Remi's lectures at Paris on logic and the liberal arts. Gerbert of Aurillac in the Auvergne, born in the mid-tenth century, and famous as Pope Silvester II., the most penetrating scholar, logician, and thinker of his age, was the pupil of Raimund, himself a pupil of Odo of Cluny. When Gerbert died in 1002 the first renaissance was already in sight. His pupil Fulbert, who died in 1029, founded the famous school of Chartres ; other pupils became teachers throughout France. The influence of Fulbert coalesces with the upgrowth of Norman power and humanism under the influence of those great thinkers from northern Italy, Lanfranc of Pavia and Anselm of Aosta.

In the first quarter of the tenth century Rolf, or Rollo, the leader of the Northmen in France, entered into feudal relationships with Charles the Simple, and became the lord of a great area in the basin of the lower Seine henceforward known as Normandy. Dr. Hodgkin declares that 'though 'Frankish historians persisted for generations in calling 'Rolf's people pirates, the new-comers soon assimilated all 'and more than all the civilization of their Frankish neigh-'bours ; and Norman literature, Norman chivalry, Norman 'architecture became the envy of Europe.' Rolf was succeeded by his son William Longsword in 927. He was murdered in 942 and was succeeded by his little son Richard the Fearless, who grew to be the most powerful vassal of his brother-in-law Hugh Capet. He was succeeded in 996 by Richard the Good, whose sister Emma (Gemma Normannorum) married in 1002 Ethelred II. of England and became the mother of Edward the Confessor. From that moment we may date the beginning of the Anglo-Norman Renaissance. The fugitive sons of Ethelred grew up at the Norman Court, and their cousin Duke Robert, surnamed the Devil, who was destined to die on pilgrimage at Nicæa of all places, is said to have attempted on their behalf an invasion of England that might have ended the chaos of the period of Danish rule. The child William succeeded to the dukedom in 1035, and seven

years later his cousin Edward the Confessor was called to the English throne. William's stern fight for his own position in Normandy lasted till 1060, when he had become the first feudatory in France, ruling Maine and Brittany as well as Normandy. But his eyes and those of his adventurous subjects, at last disciplined by his iron hand, were looking across the seas. The process of Normanizing England had been in full swing for a quarter of a century before the Conquest, and by 1051, when William visited England, Norman influence was dominant.

For the most part historians dwell on the misdeeds and turbulence of Norman visitors, and after 1066 of Norman conquerors. But there is another side. Normandy, rescued by Duke William from the chaos that England had suffered, under his wonderful rule had become a hearth of European humanism. In the year 1034, immediately preceding the accession of Duke William in almost the darkest hour of Norman history, Herluin, a Norman of gentle birth in the service of Gilbert Comte de Brionne, put aside the brilliant possibilities of a career that could have turned to advantage the chaos of the time, and insistently enrolled himself 'in the militia of God.' The humble monastery that he raised in the year 1040 at the spot where a little beck joins a small tributary of the Seine called the Risle, four miles below the town of Brionne, offered the refuge of its humility to a great teacher, Lanfranc of Pavia. He knew all that Italy had to teach him of law and letters, and in France had gained in the schools not only fame but many pupils. But he sought refuge from the turmoil of that tempestuous world, and for three years he found peace at Bec, as the new monastery was aptly called. In 1045 he became the prior and resumed his teaching. Suddenly Bec found itself the most famous spot in Europe. 'It revived,' writes Dr. Armitage Robinson, 'the study of letters in the north of 'Europe and furnished bishops and abbots to all parts of 'Christendom, and within a century of its foundation gave 'three archbishops to Canterbury—Lanfranc under William 'the Conqueror, Anselm under his sons Rufus and Henry I., 'and Theobald in the anarchical days of King Stephen.'

The monastery and school of Bec arose at the moment when the influence bequeathed by Fulbert of Chartres was spreading in all directions. The coming of the great Lanfranc

gave it fame, and fifteen years later Anselm of Aosta endowed it with a new and even serener sanctity. In 1063 Lanfranc became abbot of Caen and the young Anselm succeeded him as prior of Bec. It is only possible here to indicate all that Bec and Caen meant to Normandy and England. The schools founded at Bec by Lanfranc fore-ran his schools at Caen ; the Customs of Bec, probably devised by Lanfranc and Anselm in council, were carried to Canterbury and dominated English monasticism. The forces represented in the mid-eleventh century by Lanfranc and Anselm were destined to deal with an England that was already prepared for religious and educational reform. Abbo of Fleury in the last quarter of the tenth century had so organized learning at the Abbey of Ramsey near Huntingdon that it had become practically of university rank before the Conquest, and Ramsey hardly stood higher than London, Evesham, and Winchester. Already there was a tendency on the part of scholars to seek specific places for the interchange of thought, whether it were at Ramsey, Bec or Caen, Laon or Paris, Canterbury or the religious centres that took their Norman note from Canterbury. Normandy had seized French and Italian humanism with an ample hand, but England under the Norman rule went further and faster than France herself.

There are few more significant phenomena in the history of scholarship and letters than the amazing speed with which England grasped new opportunities and new learning. We see the invaders coming with sword in the right hand and letters in the left. If we look at contemporary documents we get hints of a people as bent on learning as on conquest. We see a deed of 1066 witnessed by ' Ilgerio pedagogo ipsius ' Roberti Comitis.' While Ilger, the schoolmaster of the Conqueror's eldest son, was in England, presently we find Arnould Malcouronne his chaplain establishing schools at Caen side by side with those founded by Lanfranc. Later, Arnould went east and became the first Latin patriarch of Jerusalem. Nor was the case of Ilger the Norman schoolmaster, or tutor, a solitary instance, for in a deed of 1076 we read of the teacher of the sons of Richard de Courcy. The Normans brought their teachers with them, and in dominant fashion imposed upon the whole land Norman teaching. But they also brought with them the complete episcopal machinery of education which immediately after the Conquest we find in full operation.

Thus in 1090 and 1091 respectively we see at Lincoln and at Sarum the chancellor of the diocese in entire control of the schools of the diocese. Every collegiate church of secular canons had the duty of maintaining a grammar school and the right of educational monopoly in the area. The crown exercised the right of granting such monopolies, as in the case of Gloucester, soon after the year 1100. In all cathedral cities, whether the cathedral was monastic or not, the bishop retained in his own hands the control of the schools. But in the case of non-cathedral foundations such as Derby and Gloucester, the Augustinian canons secured full jurisdiction independent of the bishop. Thus collegiate houses such as Beverley, Southwell, and Worcester appointed, in episcopal fashion, a chancellor, endowed with a prebend, who was known as the Magister Scholarum ; while in the case of a monastery the abbot himself acted as the Magister Scholarum, and in educational matters controlled even the secular clergy of his area. Yet this jurisdiction was granted to the monastery by the bishop, while the Crown claimed to be the ultimate source of such jurisdiction, and at times, as at Gloucester, confirmed the grant. Canons and prebends in a cathedral city or a priory had similar jurisdiction over the schools in their prebends. The point, however, to bear in mind is that the Normans in this way so organized education in Normandy as well as in England as to secure what we may call the necessary results of single control. That in itself was an achievement which made the rise of the university system on a great scale a certainty.

It is not always realized how rapidly the universities evolved under the influences and traditional forces that we have described. To understand the reason for the evolution of Oxford as a centre of learning is not at present possible. Certainly Oxford was a walled town of some importance at the Conquest ; it had a mint and issued its own money, and the great Council held there by Stephen in 1139 indicates the importance of the town. Perhaps the choice of a centre of learning at the opening of the twelfth century lay between London, Canterbury, and some place undisturbed by the political conditions of these important sees. However that may be, we find in 1117 a Norman, the chaplain of Queen Margaret of Scotland, lecturing in Oxford to classes of sixty

or a hundred students, and there he remained, calling himself 'Magister Oxinfordiæ' till 1121, when he succeeded Arnould Malcouronne at Caen, a *magister* and *doctor Cadomensis*. It may have been an accident that induced the canons of St. Frideswide to facilitate the formation of an adult school at Oxford not unlike those of Bec or Caen or Laon. But if so it was an accident which changed the future of the world, since the school not only survived but rapidly became a European centre of thought. In 1133 Robert Pullein, subsequently a cardinal and chancellor of the Curia, was lecturing there on theology, and perhaps it was the meeting of the Great Council at Oxford of 1139 that suggested to the bishops the educational possibilities of the town. The scheme of St. Frideswide certainly persisted, and in 1149 Oxford was chosen by Vacarius, the jurist of Bologna, for his lectures on the civil law. He had been called to England by Theobald of Bec, Archbishop of Canterbury, with the definite intention of founding a school of law.

Here we see the great reactions in process. We feel the reliance of Bec and Caen on Italy begotten by the great tradition of Lanfranc and Anselm reacting on the whole future of English learning. Irnerius, the first of the Glossators, lecturing at Bologna, at the beginning of the century, on the Roman Digest, presided over the birth of the first of the great universities. Magister Vacarius, lecturing at Oxford in the very year that he finished his noble Summa of the Code of Justinian, may be said to have marked the beginnings of the third of the three great universities of Europe—Bologna, Paris, Oxford. For more than half a century Vacarius remained in England, and in his time Oxford became a throbbing centre of human thought where the canon law, codified by Gratian in 1144, vied with the civil law in the eyes of men. Meantime the University of Paris had arisen. The Chancellor of the Cathedral of Paris, the Licenser of teachers—an official to be found in all French and English dioceses—had formed a guild of teachers on the island round Notre Dame. Meanwhile on the hill across the river the abbot of the collegiate Church of Ste. Géneviève had his own chancellor and guild of teachers, and to him Abailard turned when driven from the cathedral school.

How much earlier Paris is than Oxford—if at all—we shall

probably never know. But it was Abailard who gave the schools of the Island and the Hill the fame which made them the centre of European thought, and Abailard was of that school of Laon which produced such extraordinary results in the history of English and French humanism, the school that through the Anselm brethren gave new vigour to theology, the arts, and science, that through Abailard and William de Champeaux and Anselm gave a new impetus to philosophy, and through the travels and labours of Adelard of Bath became the source of a new system of thought. Mr. Lane Poole refers us to the important work which Adelard accomplished in introducing large ranges of Arab science into the Latin world—his translation of the astronomical tables of Al Khuwarezmi, and his translation, also from the Arabic, of Euclid's 'Elements of Geometry.' He was a 'leading 'pioneer in a process which altered the whole system of learn-'ing and teaching in Western Europe.' Thus while Abailard was stimulating thought and life in England and inspiring even by repulsion the great mental activities of men like Becket and John of Salisbury, we find the bases of science being laid by an Anglo-Norman thinker from Bath, and the bases of law by Italian thinkers at Oxford, Canterbury, and York.

It is an extraordinary record, and subsequent events show that the Anglo-Norman revival of learning and of thought was perhaps more permanent than the Norman efforts in France and Sicily. The Norman mind in its new environment was capable of bringing to fruition, better perhaps than elsewhere, the thoughts that it had absorbed in France and Italy and among the Saracenic successors of the Greeks. And its achievements became part of the national inheritance. The structure of the earlier Norman castles, and perhaps not less of the first Norman churches, indicates one side of the Anglo-Norman character, a certain rugged self-will in governance, in war, in religion; but the national evolution of these structures at the bidding of men who had absorbed the entire humanism and thought of their day shows the significance of the Norman character: rugged yet subtle, rebellious yet susceptible of discipline, deeply based and therefore capable of great heights, volatile and adventurous yet profound and deep-thinking. The faults of the race as written in history

are the necessary counterparts of their virtues, and this we see whenever we examine any national monument or institution in art or thought, in literature or law, in government or religion, which we can trace back to the operations of the Anglo-Norman mind.

This is not the place in which to examine the reaction of the philosophy of Anglo-Norman thinkers—of men like Adelard or John of Salisbury, and later of men such as Roger Bacon and Adam Marsh—on the development of thought; but certainly we find in it that incisive critical faculty which is never satisfied with less than the truth and never willing to be deceived by words or theories. To the Anglo-French tradition of almost scornful thinking we seem to owe the scientific freshness and inventiveness common to the great thinkers of France and England. These thinkers are never ponderous wielders of words: they cut right through the thoughts of men and thrust aside with the contemptuous irony common to two such different minds as Walter Map and Roger Bacon irrelevance and vagueness. If there is such a thing as heredity of great thinking power, it seems possible to trace some of its sources in England and France back to the thinkers of the twelfth and thirteenth centuries. Indeed, if the combined subtlety and ruthlessness of Anglo-Norman thought is to be found in the scientific and philosophic thinking of the twelfth and thirteenth centuries, it is certainly to be found in equal abundance in the growth of English law and of English political and social institutions. The Conquest gave to England a strong central force controlling a clearly defined localized system which was so devised that it could not destroy a central system containing within itself the germs of executive and judicial as well as legislative powers. The local system drew into itself both Anglo-Saxon and Norman institutions, and made a large measure of local self-government possible without affecting the development of central institutions. The local usefulness of feudalism was preserved while feudalism was kept within almost entire subordination to a central authority, which contained within itself the ultimate virtue of representing, in ever-growing measure, the congruent views of those who played their part in local life. No doubt the process of evolution was slow, but the whole of that process was inherent in the governmental conceptions of the great

Norman and Angevin kings. The result was something new in the history of institutions, and not only gave to England a constitution of extraordinarily delicate balance, but maintained the essential separateness of the legislature, the executive, and the judiciary, while maintaining the vital unity of this complex social organism. That these broad lines of evolution were intentional is plain from the earlier history of the Curia Regis; that they have supplied to the whole civilized world principles of democratic government is perhaps the greatest achievement of the Anglo-Norman Renaissance.

Side by side with the emergence of the elements of a constitutional system we perceive the slow unfolding of a great system of law. At the opening of the twelfth century Irnerius and his successors had restored to a disordered world the infinite blessings of the Roman civil law, and the University of Bologna, a democracy of students, had dictated the principles of law to the rulers of Europe. And while this amazing spectacle was in progress, the Roman Church, through the vast codifying capacity of Gratian, imposed upon her people a second system of law—the canon law, itself a product of the Italian mind. It might have been supposed that England would have been dominated by the united action of these two systems, which had impregnated the minds of the keenest thinkers of that age. And yet the Anglo-Norman mind preferred to evolve another legal system more suited to the capacity and peculiar genius of the race.

There are few comparisons more interesting than that between the development of law on the Continent of Europe and the parallel development in England. From a very early date the customary laws of Central Europe in all their amazing diversity were penetrated and permeated by the great Theodosian Roman Code. The *lex Salica*, the *lex Baivariorum*, the *lex Angliorum et Werinorum*, the *lex Saxonum*, and the *lex Frisiorum* were almost as fully Romanized as the *lex Burgundiorum* and *Breviarium* or the *lex Visiogothorum*. This welter of laws, uncentralized and shapeless, had as its only hope some ultimate return to the Roman model, and it was the University of Bologna and her Glossators that strove to secure this goal, and in fact secured the gradual official 'recep-' tion' of Roman law, the last manifestation of the movement

being the formation of the French Code by Napoleon. In England the same need did not arise. The Theodosian Code never reached England, and the Saxons (*more Germanico*) almost stamped out the traces of the great imperial law. After the Conquest, however, it became plain to the judges trained in the principles of the civil and the canon law that the customary law of England was capable of ample developments to meet the needs of the people, and that in this fashion foreign or papal control could best be set aside.

This is not the place in which to trace the history of the English customary or common law, but it is important to observe that it was developed by Normans who had been trained in the principles of Roman law in the direct tradition of Bologna, and was moreover deliberately developed in the atmosphere of the Anglo-Norman tongue. The subtlety of the Norman mind was ceaselessly at play with the common law, and developed it by means of case law and fictions of growing complexity in the directions indicated by economic and quasi-political needs. The growth went on in secret, and the secret was hidden in the Year Books. In the arguments and judgments that are preserved in the Anglo-Norman tongue, the student of philosophy as well as of law will learn something of the penetrating ability of the Anglo-Norman mind, its capacity for wrestling with first principles, its power of directing the processes of legal growth to meet new emergencies. But it is well to remember that these minds were trained in the subtle Italian school of legal thought, and that the growth both of the canon law and of the equity which supplemented it, was controlled by the juridical ideas of the great Roman lawyers and their commentators. The schools of Bec, Caen, and Laon maintained their grasp on the development of the English people for centuries; and when the principles of equity came to redress the balance of the common law, it was the tradition of Bologna which dominated the process. It was not, however, till several centuries later that the English legal system was, through the work of Blackstone, displayed as a magnificent whole, and England and the world realized that the work of the Norman lawyers was not only a monument of jurisprudence, of singular splendour and serenity, but an achievement as capable as the Roman jurisprudence of governing the fortunes of the world. Black-

stone believed that with the aid of great judges and a wise legislature the legal institutions of England were capable of serving without any fundamental changes the whole human race. I have ventured to ask elsewhere

'Was he not justified when the great judges appeared, the lines of giants beginning with Stowell and Eldon; was he not justified when the legislature began the process of purification; was he not justified when Dominion after Dominion moulded the great Common Law of England to the purposes of new realms and new ages; is he not justified to-day when a large part of the human race dwells in freedom and peace under the shadow of the laws that he was the first to rationalize and immortalize in the pages of his Commentary? To-day the great Common Law of England divides with the law of Rome the allegiance of modern civilization, and William Blackstone played no mean part in the achievement of so superb a consummation.'

This and the English constitution may be regarded as the chief products of the Anglo-Norman mind, but it is interesting to note that the Normans achieved their purpose by the imposition of their tongue on the law courts, on the schools, and on the universities that they created. The use of the Anglo-Norman tongue in the law courts persisted for many centuries, and Mr. Pike, the learned editor of the Anglo-Norman Year Books, tells us that

'There has probably never been a language which after so long a lapse of time has left such a perfect memorial of itself as the French spoken in English Courts of Justice and written in various instruments of the same period. There are other ancient languages which we know as they are written in history, poetry or philosophy, and which have left such indications of ordinary speech as are to be found in the drama or in artificial displays of oratory. But the colloquial phrases and idioms used by men of cultivation in their ordinary avocations more than four hundred years ago have been handed down in the Year Books, which are, in this respect, absolutely unique.'

Even to-day the language of the law courts is redolent of the Anglo-Norman tongue, which is indeed still the official language of the sovereign in the course of the making of laws. The sovereign to-day in giving his assent to an English law says, 'Le roi le veult,' and if he dissented he would say, 'Le roi s'avisera.' It is not unfitting that the head of a constitu-

tional system which is essentially Anglo-Norman should speak in that tongue, and it is significant of the vast range of the Anglo-Norman influence that to-day, in every country of the world which claims to belong to modern civilization, the constitution which the Normans created is the constitution that civilized people obey. And this pressure of the Norman tongue, which was a matter of policy, harsh and ruthless, but, as things then were, far-seeing, so permeated the land that even to-day in a country town where the people have never heard of a Norman tongue, we hear the town-crier calling, 'Oyez, oyez, oyez!'

But it was not only in the realm of law that the Norman tongue was imposed. It was from the first imposed upon the schools, and until the Black Death in 1349, or a little after, the children had to do their lessons in a foreign tongue. It was a harsh and apparently unjustifiable policy; it was a policy that Henry VIII. and Elizabeth tried to impose upon Ireland without success, which Macaulay in fact imposed upon India with a measure of success or unsuccess that is not yet determined. But at any rate the Normans were right. They knew that the chaos of English life with which they were faced in the latter years of the eleventh century could only be ended by some unifying force. They had in Normandy seen what that unifying force could do for them when, in the course of two decades, it raised the duchy to the position of a determining force in the affairs of France and Europe. They knew moreover that if England was to be great she had to be dominated by the learning and the system of religious control of learning which the schools of Normandy with their Roman Imperial heredity had made a model for the world. The strangely rapid rise of learning in the island kingdom in every phase possible to the Middle Ages justified this policy. It could not last for ever, but in fact it lasted for three centuries. Under the Anglo-Norman dominance our great universities were begotten and sprang at once into European fame, and it is not too much to say that in the shadow of a tongue which dominated the thought of the nation there was prepared the basis of the great literature which from the days of Chaucer to those of Browning has reacted with incalculable effect on the thought and the poetry of the world.

Chaucer was an Anglo-Norman poet who went for his inspiration to the singers of France and Italy. He brought them into the tradition of our literary tongue. His contemporary, Eustache Deschamps, the first of the French realists, châtelain of Fismes and *bailli* of Senlis, writing of Chaucer in a famous ballad that bears the English poet's name, hails him as one

> . . . . . 'Qui a
> Semé les fleurs et planté le rosier,
> Aux ignorans de la langue Pandras,
> Grant translateur, noble Geffroy Chaucier.'

We may indeed say of the twelfth and thirteenth centuries what Sir Sidney Lee, in his work on the French Renaissance in England during the Tudor age, says of the sixteenth:

> 'In the study of the causes and the origins of English literature in the sixteenth century it must always be borne in mind that France stimulated England's intellectual energy in two ways—by imparting her own knowledge, ideas, and example, and by imparting the knowledge, ideas, and example which she herself derived from Greece and ancient and modern Italy.'

The same principle is true of the Anglo-Norman Renaissance, though in that age the Italian influence was more direct than in the Tudor period. The coming of the Norman tongue into England, with its various dialects and its great literary capacity, was an instance of the direct impact of Norman 'knowledge, ideas, and example.' Macaulay was certainly wrong, as Mr. Saintsbury has pointed out, when he asserted in the pages of this REVIEW seventy-eight years ago, in a famous essay on Leopold von Ranke's 'History of the Popes,' that in the twelfth century the Langue d'Oc still stood alone as a literary tongue. He wrote:

> 'The other vernacular dialects, which since the fifth century had sprung up in the ancient provinces of the Roman Empire, were still rude and imperfect. The sweet Tuscan, the rich and energetic English, were abandoned to artizans and shepherds. No clerk had ever condescended to use such barbarous jargon for the teaching of science, for the recording of great events, or for the painting of life and manners. But the language of Provence was already the language of the learned and polite; and was employed by numerous writers, studious of all the arts of composi-

tion and versification. A literature rich in ballads, in war songs, in satire, and, above all, in amatory poetry, amused the leisure of the knights and ladies whose fortified mansions adorned the banks of the Rhone and Garonne.'

Lord Macaulay overlooked the fact that early in the twelfth century Italy had put aside the garment of the Provençal troubadours, and was using her own vernacular tongues through the voices of the early poets of Pisa and Siena, of Bologna, Fiesole, and Pistoia, some of whom were singing almost as early as William Duke of Aquitaine, the first of the troubadours. Not least among the singers of France, though not the earliest, were the Normans. It is certain, as such things go, that the *Chansons de Geste* were not the children of Provence, but of the more virile north, and when Taillifer at Senlac sang his song ' de Karlemagne et de Rollant ' he was heralding not only the glories of war but the coming splendour of a new and powerful literature based on religion and drawing its inspiration from the services of the Church. The Anglo-Norman literature is extensive in range and motive, capable of great indeed epic heights, and combining something of the powers and gloom of the Scandinavian Saga with the subtle *nuances* of the French literature of which it was a forerunner. Indeed it is difficult not to trace in the tragedy of Shakespeare and the epic of Milton notes that sprang in some mysterious heredity from the great Anglo-Norman drama ' Le Mystère ' d'Adam.'

It is a fortunate fact that Dr. Paul Studer, the Taylorian Professor of Romance Languages in the University of Oxford, should have given us at the present time the first English edition of a drama which, as he says, ' belongs to that common ' patrimony of Anglo-Norman literature of which French and ' English are equally proud.' It was out of the dramatic tendencies of the Church services that dramas of this type sprang, and in England where folk drama was part of the national life the tendency was eagerly developed. Professor Studer reminds us that Edgar Bishop of Winchester, as early as the mid-tenth century, in his ' Concordia Regularis ' sets forth the details of these elaborate dramatic interpolations in the Mass. Biblical characters moved upon the sacred scene, and ' when Adam and Eve had once secured a place

' among the prophets, few stories lent themselves to dramatic ' treatment better than theirs.' At Laon, of literary and philosophic fame, and at Rouen the story of Balaam had been dramatized, and the larger venture of staging the Fall of Man came in due course with the rapid literary development of the tongue after the completion of the conquest of England. Philippe de Thaun, an Anglo-Norman, in the year 1119 had produced in six-syllable couplets his *Comput* on Chronology, and in 1130 he dedicated to Adela, the Queen of Henri Beauclerc, his Bestiary in the same metre. Before 1150 another Anglo-Norman, Samson of Nanteuil, had versified the proverbs of Solomon. Almost at the same time Geoffrey Gaynor wrote the Chronicle of England, and Wace in the ' Roman de Rou ' in 1160 celebrated in octosyllabic and alexandrine verse the conquest of England.

It was at this moment that the ' Mystère d'Adam ' was written, and it certainly was from the pen of a great dramatist who was capable of extraordinary control over the use of the octosyllabic and decasyllabic verse, fitting the metres to the strong drawing of character. The personalities of Adam and Eve, Cain and Abel are fine examples not only of character drawing, but of the development of character in relation to a changing environment. That is the great test of dramatic art, and the author of this semi-liturgical drama possessed it in a high degree. The breaking in of the Latin chorus with the terrible words, rising above the vernacular octosyllabic verse in minatory tone, ' Ubi est Abel, frater tuus,' must have been dramatic in the extreme in the setting of a great cathedral. The play to-day is alive with dignity, pathos, tragedy, terror, penitence. The Anglo-Norman who wrote it learnt his lesson in the great school of human life.

The ' Mystère d'Adam ' was the central point of a literature of high merit. The Anglo-Norman writers were equally at home in sonorous and in swift and rapidly varying verse, and if the lyrics of Adam de la Halle cannot be claimed for England, yet they were perhaps excelled by the ' Lais ' of our first English poetess, Marie de France, or the poems attributed to William the Clerk, as his dramas were equalled by the author of the ' Mystère d'Adam.' The Provençal poetry died of inanition; it exhausted in three great periods the possibilities of its magic, but it survived the Anglo-Norman literature, which

disappeared almost suddenly in the mid-fourteenth century with its greatest possibilities still unexhausted—possibilities to be measured by the triumphs of French literature. But ere it vanished at the touch of the Black Death it had achieved the purpose of its presence, for it had given to the language of the island that it had dominated new ranges of passion, new elasticities of phrase, a capacity for drama which proved immortal, an epic grasp that could not die ; and it had given to England a poet in Geoffrey Chaucer, who placed the future of English literature beyond cavil and beyond doubt. If a renaissance may be likened to a rainbow arch linking two fruitful lands across a barren waste, it may be said that the Anglo-Norman tongue was the key of that heavenly bow, for it bound together not only two literatures and two famous lands, but was the brilliant element that marks out in history the essential unity of the humanism of France and England, which stands to-day as it stood eight centuries ago, as a bow of hope above the terrible wastes of war.

J. E. G. de Montmorency.

OLD TESTAMENT FOLK-LORE

1. **Folk-lore in the Old Testament: Studies in Comparative Religion, Legend, and Law.** By Sir JAMES GEORGE FRAZER. Macmillan. 1918.
2. **The Religion of the Semites.** By W. ROBERTSON SMITH. A. & C. Black. 1894.
3. **The Book of Genesis.** By S. R. DRIVER. Methuen. 1904.
4. **The Mystic Rose.** By A. E. CRAWLEY. Macmillan. 1902.
5. **The Tree of Life.** By A. E. CRAWLEY. Hutchinson. 1905.
6. **The Evolution of Religion.** By L. R. FARNELL. Williams & Norgate. 1905.

THE appearance of this long-expected work on the Old Testament is an important event not only for Biblical scholars, but also for that very large body of men and women whose languid interest in the Bible is sustained rather by a kind of traditional instinct than by direct knowledge and appreciation of its contents. The contrast between the affectionate reverence of our forefathers for Holy Writ and the scant respect for it on the part of the majority of present-day Christians is a very striking fact. It has often been alleged, and quite rightly, that one of the reasons for this is to be found in the somewhat ruthless methods of modern biblical criticism. This criticism is believed by many people to have undermined the veracity, the reliability, and therefore the authority of the Bible, with the result that people have lost faith in what they understood as the 'inspiration of the Bible.' There is another factor which has, consciously or unconsciously, played a large part in the minds of people, and contributed towards this depreciation of the Bible; it is this: that with the one great exception of the Psalms, the most familiar parts of the Old Testament are certainly not the most edifying. Nobody who comes much into contact with ordinary people on the religious side will deny that the best known portions of the Old Testament are the stories of the Creation, of the Garden of Eden, Cain and Abel, the Flood, the Tower of Babel, Jacob and Esau; to which may be added Jonah in the whale's belly and Daniel in the lion's den. These are the most

familiar ; a few other passages, by no means always illustrative of the best that the Old Testament has to offer, are forced upon members of the Church of England by the ineptitude of those who drew up the present lectionary. Thinking people, and even those who normally think but little, look upon the stories above enumerated as puerile, and tend to judge the whole of the Old Testament in the light which they cast.

To many it seems as if the sheet-anchor of their faith had gone. They find it hard to have to give up convictions which had become endeared to them, from which they had derived comfort, and which perhaps they loved most of all for associations' sake. But the time of disillusionment has come, and must be faced ; for truth is inexorable. While recognizing however that much of the fabric of traditional and time-honoured convictions has been undermined, we have to remember a consideration, too often ignored, that things are not false because they are not what we thought they were. ' Let a man learn,' says Emerson in his essay on Montaigne, ' to look for the permanent in the mutable and fleeting ; ' let him learn to bear the disappearance of things he was wont ' to reverence without losing his reverence ; let him learn ' that he is here not to work, but to be worked upon ; and that ' though abyss open under abyss, and opinion displace opinion, ' all are at last contained in the Eternal Cause : " If my bark ' " sink, 'tis to another sea." '

There are facts in connexion with the Old Testament the recognition of which will to some people seem an even deadlier blow to belief in the inspiration of the Bible than, in their minds, the Higher Criticism has been. Some of them will try to explain away these facts ; others will hail with delight what they will hold to be the final proof that the Bible is an old-world, out-of-date, collection of fables, fit for oblivion. Sir James Frazer places the facts before the public as they have never been placed before. To quote his own prefatory words :

' The scope of my work has obliged me to dwell chiefly on the lower side of ancient Hebrew life revealed in the Old Testament . . . but to do so is not to ignore, far less to disparage, that higher side of the Hebrew genius which has manifested itself in a spiritual religion and a pure morality, and of which the Old Testament is the imperishable monument . . . The annals of savagery and superstition unhappily compose a large part of human literature ;

but in what other volume shall we find, side by side with that melancholy record, psalmists who poured forth their sweet and solemn strains of meditative piety in the solitude of the hills, or in green pastures and beside still waters; prophets who lit up their beatific visions of a blissful future with the glow of an impassioned imagination; historians who bequeathed to distant ages the scenes of a remote past embalmed for ever in the amber of a pellucid style? These are the true glories of the Old Testament and of Israel; these, we trust and believe, will live to delight and inspire mankind, when the crudities recorded alike in sacred and profane literature shall have been purged away in a nobler humanity of the future.'

The fine appreciation of the Old Testament contained in these sentences should be borne in mind by readers of Sir James Frazer's book. He gives numberless analogies from savage beliefs and traditions, and places them alongside the Old Testament stories; but it would be doing a great injustice to him to draw the inference that his purpose was to depreciate the Old Testament. He recognizes the use which the Old Testament writers made of the material they handled; that they manipulated and moulded it for lofty purposes. Nothing is more striking than the contrast between the naked puerilities of the savage stories, and the, generally speaking, simple yet dignified transformation in which an originally parallel conception appears in the Old Testament.

Nothing has so contributed to our knowledge of the religions of the world as the arduous and unremitting labour of anthropologists. Many of the leading authorities in anthropology have concentrated their studies mainly upon that branch of it which deals with the religious or quasi-religious conceptions of men, including especially the ritual and beliefs of savage races. Here we touch upon something that is common to human nature. With rare exceptions all men from the primitive savage down to his cultured descendant of the present day have some belief in the supernatural. The religions of to-day, whether we acknowledge it or not, have fundamental points of contact with the religions of primitive man, for human nature in its essence is the same throughout all ages. The solidarity of the human family is nowhere more emphasized than in its need for supernatural belief. This has been illustrated in a convincing and incontrovertible manner by the study of religious beliefs among

men in the lower stages of civilization. As Dr. Farnell truly remarks: 'All through the present stages of savage men 'there prevails an extraordinary uniformity, in spite of much 'local variation, in ritual and mythology, a uniformity so 'striking as to suggest belief in an ultimately identical 'tradition, or, perhaps more reasonably, the psychologic 'theory that the human brain-cell in different races at the 'same stage of development responds with the same religious 'speech or the same religious act to the same religious *stimuli* 'supplied by its environment.' * The anthropologists have greatly contributed to the serious study of religion by furnishing the necessary *data* as to its origin and growth. 'To under-'stand the ways of God with man, and the whole meaning of 'His plan of salvation, it is necessary to go back and see His 'work in its beginnings, examining the rudimentary stages 'of the process of revelation.' † These words were written in a somewhat different connexion, but they are none the less appropriate here. We have learned to see, thanks to the labours of anthropologists, that the religious product, i.e. the great mass of early conceptions and superstitions and delusions which formed, and forms, the religion of savage man, was, on the face of it, a complex growth. Religion in fact is subject to the laws of ordinary development.‡ With the advance of the human intellect, the forms of religious belief become more spiritualized. This process is clearly visible within historical times, and we are therefore justified in assuming that the same process must have been going on for untold centuries previous to historic times. Doubtless there are many people, even at the present day, wholly opposed to such an attitude as this towards religion. They maintain that there can be no rudimentary stages in the process of revelation, because the idea of revelation implies an act full and complete in itself, irrespective of, and in its essence unconnected with, anything that went before. They would say, for example, that the revelation on Mount Sinai did not admit of previous stages because it

* 'The Evolution of Religions,' p. 9.

† 'The Old Testament and the Jewish Church,' p. 192.

‡ 'What we term "Religion" marks a psychical predisposition of a biological character which is of supreme evolutionary character.' Crawley, 'The Tree of Life,' p. 3.

was an absolutely complete act in itself. We owe it in great measure to the anthropologists that this narrow conception of the Creator's interest in, and solicitude for, mankind has become untenable; for they have brought a whole world of facts to show that the divine activity among men cannot be restricted to any particular periods or to any particular people. It is difficult to doubt that the Apostle included all mankind when, in addressing the Athenians, he spoke of those who 'should seek God, if haply they might feel after Him and find 'Him, though He be not far from every one of us; for in Him 'we live and move and have our being.' (Acts xvii. 27, 28.)

But while the debt due to the magnificent labours of anthropologists is whole-heartedly acknowledged, we must be on our guard against certain common anthropological fallacies. There is, to give but one example, what is described as the fallacy of simple enumeration; this has been well and sufficiently dealt with by Dr. Farnell. He writes:

'On the ground of the general inductive belief that the higher races have at one time passed through a savage phase, it is too often rashly assumed that each and all of them must at one time have possessed a particular institution, such as totemism or ancestor-worship, which, as a matter of fact, is found among the majority of savage races to-day. This is to exaggerate the principle of solidarity, to ignore the fact of the great diversity actually observable among existing primitive societies, and the possibility that it was just by avoiding some particular detrimental institution that some of the higher peoples were able to proceed on their path of progress.'*

For example, where it is desired to establish analogies (e.g. for some custom or ritual of which traces are found, or supposed to be found, in the Old Testament) a great array of enumerations may lead one quite astray by seeming to establish the ubiquity of the custom or ritual under consideration; for in spite of external similarity it is quite possible that the Old Testament example may originate in an entirely different circle of ideas; if one of the supposed analogies be false it may quite possibly follow that the mass of them is likewise not relevant.

Here and there Sir James Frazer seems to us to fall into this error and to misapprehend the point of an Old

* Op cit. p. 12.

Testament passage and to bring forward a supposed analogy, which is really no analogy at all. A case in point is the chapter on 'Jonah and the Whale.' (III. 82 f.) It was not without reason that a distinguished Old Testament scholar wrote: 'I 'have read the Book of Jonah at least a hundred times, 'and I candidly confess—for I am not ashamed of my 'weakness—that I can never read this wonderful book, nor 'even think about it, without the tears coming into my eyes 'and without the quicker beating of my heart. This apparently 'absurd little book belongs to the most profound and sublime 'things that have ever been written; and to every reader 'of it I would cry: "Put off thy shoes from off thy feet, for '"the place whereon thou standest is holy ground!"' * And yet this book is illustrated by a supposed parallel from New Guinea of the most puerile nature.

The early narratives in the book of Genesis offer rich material to the folk-lorist, so that we are not surprised to find nearly four hundred pages of Sir James Frazer's first volume devoted to them. The documentary theory regarding these early narratives is not only accepted but strongly emphasized as being the only way to account for the pointed differences and direct contradictions met with in them. To take, for example, the stories of the Creation. In one version, as Sir James Frazer points out, 'God created the lower animals 'first, and human beings afterwards, and the human beings 'consisted of a man and a woman, produced to all appearance 'simultaneously, and each of them reflecting in equal measure 'the glory of their divine original.' This is in what is called the 'Priestly' narrative, which contains several indications of conceptions of a later date than those appearing in the other, the Jehovistic narrative. In this latter man is created first, then the lower animals, and last of all woman, made out of a rib from the man's side. This is a reversal of the other account. It is quite obvious to any unbiassed reader of Genesis that the diametrically opposed views here presented cannot come from the same author; and it is surprising that advocates of the traditional and illogical standpoint of unity of authorship should still exist. It is therefore interesting to get the opinion of one who approaches the subject with an

* Cornill, 'Der Israelitische Prophetismus,' p. 169 (1896).

open mind, and is led to his conclusion by the logic of facts and common-sense. This is especially so in view of the further fact that Sir James Frazer is not a blind follower of the Higher Critics; he differs, e.g., from many of them in his belief in the historical character of the patriarchal narratives. 'I 'see no sufficient reason to question, with some modern writers, 'the historical reality of the great Hebrew patriarchs, though 'doubtless some of the incidents and details which tradition 'has recorded concerning them are unhistorical.' (I. 391.)

We have drawn attention to what is said about the Creation narratives not so much on account of Sir James Frazer's acceptation of the 'documentary theory,' but because of the very interesting results to which his investigations of extra-biblical creation narratives have led. His words are well worth quoting:

'The foregoing examples may serve to illustrate two very different views which primitive man has taken of his own origin. They may be distinguished as the theory of creation and the theory of evolution. According to the one, the human race was fashioned in its present form by a great artificer, whether a god or a hero; according to the other, it was evolved by a natural process out of lower forms of animal or even vegetable life. Roughly speaking, these two theories still divide the civilized world between them. The partisans of each can appeal in support of their view to a large consensus of opinion; and if truth were to be decided by weighing the one consensus against the other, with Genesis in the one scale and 'The Origin of Species' in the other, it might perhaps be found, when the scales were finally trimmed, that the balance hung very even between creation and evolution.' (I. 44.)

To which it may be added that a case might be made out for the author of the 'Priestly' narrative in Genesis being, perhaps in spite of himself, inclined to weigh down the scales in favour of 'The Origin of Species'!

The chapter on the Fall of Man is intensely interesting; the author deals in an illuminating and convincing way with what has puzzled every Old Testament student, viz., the problem of the Tree of Life. In the Genesis story it is the Tree of Knowledge of Good and Evil which occupies the central place, whereas one would naturally expect the Tree of Life, whose fruit confers immortality on those who eat it, to be most prominent. The incongruity has been accounted

for by supposing two originally distinct stories to have been unskilfully interwoven. But Sir James Frazer believes, and gives good grounds for his belief, that the story as we now have it is incomplete, that it owed its original existence to an attempt to explain the cause of man's mortality,* and to set forth how death came into the world. He contends that as first told it took some such form as this : There were two trees in the Garden of Eden—a Tree of Life and a Tree of Death ; to man was left the choice whether he would eat of the fruit of the former and live for ever, or of the latter and die ; and, although specially warned against eating of the fruit of the Tree of Death (Gen. ii. 16, 17), he takes of this and inherits death. The reason for his choice was due to the Serpent, 'more subtil than any beast of the field,' who justified this reputation by appropriating to himself the blessing of eternal life by eating of the fruit of the Tree of Life, while he persuaded man to eat of the fruit of the Tree of Death. The appearance of the Serpent in the story was due to the widely-spread belief among primitive men that it had the power of ever renewing its youth by casting its skin. This belief was held very widely in antiquity, the Semites as well as the Greeks and many other races sharing it ; illustrations in abundance are given. So the story in its original form told of how the benevolent Creator gave to His highest created beings, man and woman, a world of delight, an earthly paradise, where they could live in happiness, free from toil and care, and secure from all harm. Then, as a crowning mercy, He resolved to endow them with the supreme gift of immortality, but determined that they should be the arbiters of their own fate by leaving them free to accept or reject the proffered boon. The Serpent is sent as the Creator's messenger to tell them of the virtue and deadliness respectively of the two trees in the garden, and then to leave to them the choice. But he perverts the message, and tells the woman that it is the fruit of the Tree of Death which she ought to eat ; she believes him, and eats it herself, persuading the man to follow her example. The Serpent, on the other hand, eats of the fruit of the other tree and obtains immortality.

* Professor Gunkel was, we believe, the first to point out and deal fully with what he calls the ætiological elements in Genesis in his commentary on this book, 1st ed., 1901.

Nearly thirty pages of illustrative matter follow this recital and strengthen the intrinsic probability of the hypothesis. It may safely be said that Sir James Frazer has solved this puzzling problem. The reason why the story in its original form was modified is due, Sir James Frazer believes, to the ' vein of rationalism ' which runs through the Hebrew Creation stories.

Many Old Testament scholars will find themselves in disagreement with some of the hypotheses and contentions contained in these volumes. In particular may be mentioned the theory as to ' the mark of Cain.' Sir James Frazer believes that this mark may have been ' a mode of disguising a homicide ' or of rendering him so repulsive or formidable in appearance ' that his victim's ghost would either not know him, or at ' least give him a wide berth ; ' and he says further on that ' this explanation of the mark of Cain has the advantage of ' relieving the Biblical narrative of a manifest absurdity. ' For on the usual interpretation God affixed the mark on Cain ' in order to save him from human assailants, apparently ' forgetting that there was nobody to assail him since the ' earth was as yet inhabited only by the murderer himself ' and his parents.' (I. 191.) Interesting and instructive as the analogies are which are adduced to support the author's theory, we believe that in this case it is a different circle of ideas which was in the mind of the Old Testament writer ; and Stade's contention (noted, but rejected, on p. 78) is more likely to be the right one, viz., that this mark was the tribal mark of the Kenites, of whom Cain was the eponymous ancestor, and that it came later on to be the mark of the worshippers of Jahwe,* just as in still later times the prophets, who were *par excellence* the champions of Jahwe-worship, had a distinguishing (probably the identical) mark on their foreheads (cf. 1 Kings xx. 35). Stade substantiates his view by a number of other Biblical references, all of which must be taken into consideration to do full justice to it.†

Before we leave the extraordinarily interesting pages which deal with these early narratives a few words must be said about

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* The words Cain and Kenites are radically united in Hebrew.

† ' Die Biblische Theologie des Alten Testaments,' I. pp. 42, 43, 46. (Vol. II. is the work of Bertholet.)

the Flood story. The results of the investigations made by Sir James Frazer regarding myths and legends on this subject are very exhaustive and cover over 150 pages. The geographical diffusion of these old traditions is immensely widespread, and one marvels at the industry which has been devoted to the gathering of the material ; nothing seems to have escaped the keen eyes of the searcher ; everything is recorded : the most ancient of all the traditions, those of the Babylonians, which came from a Sumerian source, the Hebrew stories, various ancient Greek legends, European, Persian, Indian, Australian, Polynesian, Melanesian, North and South American, African, etc.—truly a wonderful array. It is interesting to note that the author believes in a very large measure in the independent origin of these legends, a view which we have long felt to be the most probable. He says :

'Apart from the Hebrew legend, which is unquestionably derived from the Babylonian, and from modern instances which exhibit clear traces of late missionary or at all events Christian influence, I do not think that we have decisive grounds for tracing any of the diluvial traditions (of the Flood) to the Babylonians as their original. Scholars of repute have, indeed, maintained that both the ancient Greek and the ancient Indian legends are derived from the Babylonian ; they may be right, but to me it does not seem that the resemblances between the three are sufficient to justify us in assuming identity of origin.' (I. 335.)

The similarities which undoubtedly exist between many of the legends he believes to be due 'partly to direct transmission 'from one people to another, and partly to similar, but quite 'independent, experiences, either of great floods or of pheno-'mena which suggested the occurrence of great floods in many 'different parts of the world.' This thoroughly sane view is altogether vindicated by the copious evidence adduced in support of it.

The second part of this great work deals with the Patriarchal Age, and here too there is abundant matter of profound interest and importance to Old Testament scholars, as well as to others. The special subjects chosen for treatment, though others are incidentally touched upon, are : The Covenant of Abraham, the Heirship of Jacob or Ultimogeniture, Jacob and the Kid-skins or the New Birth, Jacob at Bethel, Jacob at the Well,

Jacob's Marriage, Jacob and the Mandrakes, the Covenant on the Cairn, Jacob at the Ford of the Jabbock, and Joseph's Cup. Each one of these affords much material for interesting discussion. In the chapter on the Covenant of Abraham the whole subject of the meaning and significance of the Hebrew law at the ratification of a covenant is dealt with. The technical term in Hebrew for making a covenant is כרת ברית (*karath berith*), literally 'to cut a covenant;' and corresponding phrases were used in Greek and Latin. It was the ritual which gave the name to the rite: the contracting parties cut an animal in half and passed between the pieces (see Genesis xv.; Jeremiah xxxiv. 18). What were the meaning and object of this strange procedure? Some authorities hold that it symbolized the retribution which would overtake the covenant-breaker; as the animal had died so would a similar fate sweep away either or both of the contracting parties if they failed to observe the covenant. Many more or less analogous rites among various peoples are described which illustrate this contention. But it is evident, one would imagine, that although this might explain the rite, it certainly does not explain the ritual. Other authorities hold the purificatory or, better perhaps, 'protective' theory; i.e. passing between the two pieces is believed to be a purifying process, and therefore to act as a protection against any evil influence, presumably such as might induce one of the contracting parties to break the covenant. But in spite of some striking analogies which can be brought forward to support this theory it is unconvincing.

The only satisfactory explanation of the whole subject is to be found in what is called the 'sacramental theory.' This was first propounded by Robertson Smith; according to it the ritual at the making of a covenant between two men was analogous to that between a man and his god: 'In ancient 'times significance seems to be always attached to participa- 'tion in the flesh of a sacrosanct victim, and the solemn 'mystery of its death is justified by the consideration that 'only in this way can the sacred cement be procured which 'creates or keeps alive a living bond of union between the 'worshippers and their god. This cement is nothing else 'than the actual life of the sacred and kindred animal, which 'is conceived as residing in its flesh, but especially in its blood,

'and so, in the sacred meal, is actually distributed among 'all the participants, each of whom incorporates a particle 'of it with his own individual life.' * So, in the case of a covenant between two men, 'The sacrifice presumably was 'divided into two parts, when both parties joined in eating it; 'and when it ceased to be eaten, the parties stood between 'the pieces as a symbol that they were taken within the 'mystical life of the victim.' † This 'sacramental union' between the two was the guarantee that the covenant would be kept.

Sir James Frazer accepts this latter theory in conjunction with the theory of retribution, and quotes many analogous rites among different peoples in support of the combined hypothesis, the most interesting being those of the sacrificed girl and boy discovered on the site of ancient Gezer, familiar to readers of Mr. Macalister's writings on the subject.‡ Sir James believes, and most students of the subject will agree with him, that 'the rite is composed of the two distinct but 'correlated elements, namely, first the cutting of the victim 'in two, and second, the passing of the covenanters between 'the pieces. Of these two elements the first is to be explained 'by the retributive and the second by the sacramental theory. 'The two theories are complementary to each other, and 'together furnish a complete explanation of the rite.' (I. 425.) The whole subject is of great importance for the study of sacrificial banquets or sacred meals.

In the remaining chapters on the Patriarchal Age are two points which must be briefly referred to: first, the character of Jacob, as portrayed in the story of his cheating his elder brother Esau out of the birthright, assumes an entirely different complexion in the light of Sir James Frazer's investigations into the ancient law or custom of ultimogeniture, or junior-right, in contrast to primogeniture. Signs of the survival of this custom, which gives the inheritance to the youngest son instead of to the eldest, are surprisingly numerous in the Old Testament; and if, as seems quite probable, it was still in existence, though obsolescent, during the patriarchal age,

* 'The Religion of the Semites,' p. 313. † Ibid. 481.
‡ Palestine Expl. Fund Quarterly Statement for 1908: 'The Excavation of Gezer.' II. pp. 428 ff.

Jacob's action was not undertaken in order to cheat his elder brother out of his birthright, but to vindicate for himself 'that right of succession which the ancient law had universally 'conferred on younger sons, though in his own day a new 'fashion had crept in of transferring the inheritance from the 'youngest to the eldest son.' (I. 485.)

The second point is that the investigations as to the origin of ultimogeniture have led to the interesting discovery that what is known as the *Jus primae noctis*, which has hitherto been regarded as an ancient seignorial right enforced by licentious feudal superiors, was in reality an ecclesiastical permission accorded to the woman's lawful husband.

To quote Sir James Frazer's words :

'The custom, far from originating in licence, appears, on the contrary, to have taken its rise in an austere practice of chastity which was inculcated by the early Christian Church, as we learn from a decree of the fourth Council of Carthage, held in the year 398 A.D., which enacted that "when the bridegroom and bride have received the benediction, let them remain that same night in a state of virginity out of reverence for the benediction." . . . But in time the clergy judged it expedient to mitigate the rigour of the canon, and accordingly they granted husbands the right of lying with their own wives on the first night of marriage, provided that they paid a moderate fee for the privilege to the proper ecclesiastical authority. This was the true *jus primae noctis*.'

Sir James Frazer illustrates this most interesting demolition of a long standing historical delusion with a wealth of evidence of a most convincing character.

The third part of this most valuable work is devoted to 'The Times of the Judges and the Kings.' It also is rich in material of the greatest interest to Biblical scholars, and much light is shed on many obscure and difficult passages. For example, the curious expression, 'the bundle of life,' occuring in 1. Sam. xxv. 29, is carefully explained and illustrated, and is shown to contain an old-world conception which is widespread. The passage in question runs (the words are spoken by Abigail to David) : 'And though man be risen up 'to pursue thee, and to seek thy soul, yet the soul of my lord 'shall be bound in the bundle of life with the Lord thy God ; 'and the souls of thine enemies, them shall he sling out, as 'from the hollow of a sling.' As Driver * has pointed out,

* 'The Books of Samuel,' first ed. p. 156.

the word ' with ' has the force of ' in the care and custody of ' as in Lev. v. 23, Deut. xv. 3, Is. xlix. 4, which enhances the significance of the passage. The idea that Jahwe has a bundle (more strictly ' bag ') in which he keeps souls is very quaint. But it has been amply proved that savage man in many parts of the world entertains the belief that the soul can be detached from the body for short or long periods. Already in the ' Golden Bough ' * Sir James Frazer had pointed out that ' there may be circumstances in which, if the life or soul ' remains in the man, it stands a greater chance of sustaining ' injury than if it were stowed away in some safe and secret ' place. Accordingly, in such circumstances, primitive man ' takes his soul out of his body and deposits it for security ' in some snug spot, intending to replace it in his body when ' the danger is past. Or if he should discover some place of ' absolute security, he may be content to leave his soul there ' permanently.' † In the present work this is further illustrated, and one of the most striking analogies to the ' bundle ' of life ' is seen to be the *Churinga* of the Central Australians. The *Churinga* is the name given to the sacred sticks and stones associated with the spirits of all the living and all the dead members of the community.

' Each of these mysterious stones or sticks is intimately associated with the spirit of a member of the clan, living or dead ; for as soon as the spirit of a child enters into a woman, to be born, one of these holy sticks or stones is dropped on the spot where the mother felt her womb quickened Directed by her, the father searches for the stick or stone of his child, and having found it, or carved it out of the nearest hard-wood tree, he delivers it to the headman of the district, who deposits it with the rest in the sacred store-house among the rocks. These precious sticks and stones closely bound up with the spirits of all the members of the clan are often carefully tied up in bundles. They constitute the most precious possession of the tribe . . .' (II. 508.)

From various passages in the Old Testament (see, e.g., in addition to the one under consideration, Is. iii. 20, ' houses of ' the soul '—Ezek. xiii. 17, 21: ' . . . I am against your

* Second ed. p. 351.

† Mr. Stanley A. Cook referred to this subject a number of years ago in his article ' Israel and Totemism ' in the ' Jewish Quarterly Review,' xiv. April, 1902, pp. 448 ff.

' fillets wherewith ye hunt the souls ') it is evident that even in historical times the Hebrews still retained the belief that the soul could be separated from the body and kept in a place of safety.* This old-world conception is an important one in connexion with the whole subject of man's ideas regarding the spiritual part of his nature, from the earliest times onwards.

One might multiply indefinitely examples of the new light which has been thrown by this remarkable work on Old Testament stories previously only half understood or perhaps altogether misconstrued. For these volumes, for the immense research of which they are the outcome, and for the very valuable contribution to the study of the Old Testament which they offer, readers of every shade of opinion have been placed under a debt of gratitude to Sir James Frazer which it is difficult to exaggerate.

W. O. E. Oesterley.

* It is interesting to note, though the point is not mentioned in the volume before us, that the phrase ' the bundle of life ' is still used in the prayers of the synagogue, e.g. in the prayer for the departed called *Hashcabah* : ' May his soul rest in the bundle of life.'

THE HEREDITY OF THE SOUL

IT is a thousand pities that in an age of specialization the perplexed questions of heredity and consciousness, so closely akin and so intimately connected with the origin of the soul, should be so frequently separated. Our divines are usually more interested in the destiny than the origin of the soul, and although we possess the most precise forecasts of the next world, we have none but the most vague and indistinct conjectures of a previous state. Human nature being much the same everywhere, it is not surprising that a similar reproach should lie at the door of philosophy. Our metaphysicians, whose barbarous jargon is too often admirably suited to conceal the confusion of their thought, know no science ; our men of science are not alone in their impatience of metaphysics. It may be true that no absolute knowledge of either heredity or consciousness can be attained until we have some real insight into that final mystery of mysteries, the origin and nature of life itself ; but the profundity of the present darkness might perhaps be relieved by lessening the isolation in which science and speculative philosophy pursue their respective enquiries.

In one of those flashes of genius by which Balzac enslaves all who are worth enslaving, he remarks that 'if God is 'eternal be sure that He moves perpetually—perhaps God is 'movement.' The author of the Human Comedy is not usually included among the theologians—although some of us would cheerfully sacrifice a few suffragans for another Cousin Pons —and Balzac's unorthodox suggestion would be scouted by those who had studied their Augustine and Aquinas. But at least the lesser hypothesis might be maintained that consciousness is movement. Whatever else that subtle force may be which eludes our definition and cracks the wind of our poor phrase-makers, consciousness always appears as a derivative, a late and conceivably accidental outgrowth of life itself, and it seems confined to that portion of life which has the power of active movement. Life can exist without

consciousness, but not consciousness, so far as science is aware, without life.

Those who put forward this hypothesis as a basis for enquiry must frankly admit at the outset that it throws no light at present, and perhaps may never throw any light, on the origin or persistence of life in this planet. On that ultimate problem one may adopt, if one chooses, the view of Huxley that primeval life was a mechanism somehow evolved out of heat, 'a sort of active crystal with the capacity of giving rise to a 'great number of pseudomorphs;' or support the idea which Darwin suggested rather than maintained, that life first arose out of the sea; or adopt that fortuitous combination of the two which appears among the barbaric legends of the South Seas, that the sun generated life from the foam of the ocean, as a wild guess that may have more of truth in it than either scientific theory. One may even, if one chooses, champion the extraordinary doctrine of Kelvin, that life on this globe is derived from a meteoric shower and the ruins of another world;* or anticipate, what indeed seems more probable, that the wonderful nebular hypothesis recently put forward by Jeans may contain the promise of greater light than any of these speculations. These grave matters are, for the time at least, beyond the scope of the present enquiry.

Whatever the origin, the earliest form of life on this globe appears to have been mainly of the vegetable kind—life with great strength and power of growth indeed, but either rooted in one spot or passively dependent on the elements for the movement of itself or its offspring from place to place. This life, being without the faculty of movement, would, according to the hypothesis, be without consciousness. For long ages life may therefore have existed without consciousness.

But this life had the faculty, as it were, of passive variation. The wind blew, or the sea carried the seed from the soil on which it had grown to another soil with different qualities of nutrition. That alone would be sufficient to effect a slight change between parent and descendant; and the varying

* 'The hypothesis that some life has originated on the earth through moss-grown fragments from the ruins of another world may seem wild and visionary; all I maintain is, that it is not unscientific, and cannot rightly be said to be impossible.'—Lord Kelvin.

conditions of growth—a seed ripened on a sterile hill-top taking root in a fertile sheltered valley, or one from a crowded mainland carried out to an isolated island where the struggle for life was less severe—would tend still further and more definitely in the direction of differentiation and the development of individuality.

Among these living but still insensitive forms some, either from possessing more vitality or from growing in a more favourable soil, would succeed better than others ; some would be physically strong and others fragile, and would hand on those qualities to their descendants. Some of the fragile kind would sink to the level of the parasite, which in effect gives up the struggle and exists in dependence on another and stronger organism. Life is still unconscious, but the alternation of success and failure, strength and weakness, has already resulted in the distinction between independence and dependence that marks the emerging but as yet undeveloped distinction between will and no will. It is a distinction that becomes eventually of profound importance.

But another distinction presently appears. Some plants profit not from their strength but from their weakness, and derive accidental advantage from scrambling up a bank or spreading over a bush ;* the leaf or twig in time supports the plant, not the plant the twig ; the leaf becomes a tendril, a kind of primitive blind finger. Probably at first it merely takes passive advantage of the opportunities of support with which the wind presents it ; it is driven against its support and continues to rest upon it, assisted either by some sticky exudation in the leaf itself or by becoming entangled in some projection of its supporter. But those plants which held the best to their support would succeed the best, and those which happened to have slightly more sensitive or irritable tendrils would be the best equipped to succeed ; their descendants again would possess a further and inherited advantage over the descendants of the less well-equipped. Through successive generations this tendency would develop, until the most sensitive tendril directly sought its own support ; the finger is now no longer completely blind, or the plant altogether passive. Rooted in the ground, the trunk is

* Darwin, ' Climbing Plants.'

passive, but the limbs have become active. It is difficult to say that this is not a nascent form of consciousness.

If that is so, then a local and possibly accidental irritability is the foundation of the sense-organs; and consciousness seems to begin at the moment when the increasing efficiency of the sense-organs leads to the faculty of passive movement changing, perhaps almost imperceptibly, into the power of active movement.

It would evidently be an abuse of language to say that the sensitiveness to external touch, noticeable in many vegetable genera, can be called consciousness. At most it postulates a very low power of feeling, and may be therefore the sub-conscious foundation of consciousness, but nothing more; the transition from one to the other seems to occur when the passive faculty of feeling enlarges into the active power of movement. The fact that the movement is limited and local necessarily limits the extent of the new consciousness, but the first decisive step has nevertheless been taken.

The advance from passivity to activity, although of such momentous importance for the future, was for the time being probably only of slight potency, and the budding consciousness existed, as yet, as it were, in no more than one dimension. Within its own limited range the tendril could seek support, but could not, if the support proved unsatisfactory, unclasp and search for something better: it must grow another tendril and try again. The plant can seek but not discriminate; its consciousness is only nascent, but evidently not inadequate to its needs, since large numbers of climbing plants have succeeded in the struggle for life and established themselves in the world.

But this is not the only form of consciousness in the vegetable kingdom. The *drosera*, and other ancient and humble species of plants, rooted in usually poor soil, developed the faculty of obtaining nourishment from insects instead of, or rather in addition to, the nourishment derived from the soil.* Their construction is such that they can hold certain insects securely while others, apparently less suitable for absorption, make good their escape. But it is not insects alone that rest on the plant; inanimate matter, void of

* Darwin, 'Insectivorous Plants.'

nourishment, and therefore incapable of digestion is also deposited from time to time, and ejected instead of being absorbed. This evidently entails the faculty of acceptance or rejection—in other words, of choice and discrimination; and this faculty necessarily entails a limited power of active movement. A long series of experiments proved that the plant has precisely these qualities of choice and discrimination. But it is very difficult to conceive that these can exist without some elementary form of consciousness.

These primitive forms of consciousness have not, so far as we know, been developed elsewhere in the vegetable world, although Darwin confessed that when he saw 'displaced 'leaves redirect their upper surfaces towards the light by 'extremely complicated movements and by the shortest 'course' it was 'difficult to judge whether intelligence came 'into play.'* But, generally speaking, neither intelligence nor consciousness in the larger sense were requisite for success in the vegetable world; and therefore nature, economical of ends though prodigal of means, has clothed the world with vegetation whose great powers of life do not include the faculty of active movement, save in a few rare cases, and then only to a limited extent; and consequently vegetation, being without movement, is without consciousness.

We may therefore dismiss the fancies of the poets—Virgil's sapling that spoke and groaned, the knotted trees in the Inferno in which the lost spirits of suicides were confined; Tennyson's talking oak, and Shakespeare's flowers 'lamenting their enforced chastity'—with the same amused indifference with which Horace regarded the bean inhabited by the grandmother of Pythagoras. These things do not exist in nature, and, after all, one does not want to discuss the potential soul of a vegetable-marrow.

The power of movement was not further useful to the vegetable world, and therefore was not further developed. It is possible that vegetable life originated in the sea—there is a considerable marine vegetation which grows with great force and rapidity—and subsequently took root on dry land, where the conditions were more generally favourable for its advancement. But the ebb and flow of tides and the wash

* 'Vegetable Mould and Earthworms.'

of currents in the sea being more frequent and constant than the motion of the air, marine vegetation must have a greater faculty of passive movement than land vegetation, and this is seen to be the case in the flexibility of sea grasses, weeds, and mosses. The facts that land vegetation has far greater variety than marine, and that the power of movement among terrestrial plants is confined to relatively few and those not the most successful species, seem to show that the fundamental constitution of vegetable life is essentially opposed to any development of consciousness. Those plants are most numerous and widespread which have no power of active movement or discrimination, and since by the hypothesis consciousness is dependent on movement, the vegetable world in the main presents us with life without consciousness.

The lowest forms in the animal kingdom, many of which are also marine in character, show little difference from the vegetable. There are compound animals as well as compound plants on land and sea; types like the polypus which made Darwin exclaim, 'Well may one ask, what is an individual?' and animals with no more power of active movement than the plant, whose primitive organism, being suited to their environment, has survived unchanged for countless ages.

The primitive animal, like the plant, may have had no power of movement and therefore no consciousness; it passively assimilated its food, and if the food was not carried to it by a current of the sea or air, it must have died like the vegetable deprived of water. Its earliest distinctive organ was the mouth, which enabled it to absorb its food through one specialized channel instead of through its skin, and in most cases, but not in all, to develop lungs instead of breathing, like the plant, through its whole outer surface. The mouth, therefore, whose earliest common form we may perhaps see in insectivorous plants, was clearly of enormous importance; it was the beginning of localized movement, and carried with it the faculty of discrimination, or acceptance or rejection of food, through the associated sense-organ of taste.

But the subsequent development of the mouth far beyond its primitive form was coincident with the emergence of other and vastly superior faculties of general movement. In time, according to the hypothesis, the primitive animal would

attain something more than passive acquiescence with the tides or the air; the power of holding securely to a rock or boulder would naturally give rise to the faculty of resisting currents of sea or wind, and thus give some animals an advantage akin to that possessed by the climbing plant—the beginning of the sense of touch.

But evidently the animal has already a great advantage over the vegetable. The climbing plant has the sense of touch, the insectivorous plant that of taste, and each faculty connotes a certain amount of will-power and a low stage of consciousness. But the climbing plant has no sense of taste, and we may say, perhaps less confidently, that the insectivorous plant has little sense of touch; in the primitive animal, on the other hand, the two faculties, both of which involve divergent movements, are combined, with a consequent large increase alike of will-power and consciousness.

In nature, as in other things, nothing succeeds like success. The animal being now better equipped than the plant, further progress becomes possible. Still fixed to its rock or boulder, it is necessarily dependent on chance currents of sea or air for the transport of its food; but some floating limb-tendril of the primitive animal-vegetable may accidentally clutch its nourishment and push the food towards the mouth, and the repetition of this would in time give the now partially moving organism an advantage over less enterprising competitors. The limb develops an alternative use, since it can actively clutch as well as passively hold; and presently it will begin to correlate the use of the limb with that of the mouth—a difficult feat which has become instinctive to us but is beyond the capacity of a ten weeks' child. Now the correlation of faculties implies the formation of an elementary brain.

A further stage now awaits the animal—the momentous and capital event which separates it finally and for ever from its vegetable ancestors. It has the faculty of localized movement, together with the correlated use of certain parts, and the mental intelligence appropriate to that stage of development; but it has as yet no general power of locomotion, although it possesses the latent faculty of locomotion. It still waits for its prey, but the will to seize it has developed from the time when it accidentally clutched its nourishment; the next step, of profound importance, was when the will to

go in search of food arose naturally from the will to seize what came within reach.

The advance may again have been accidental and unpremeditated, consequent on the organism being washed off its rock and compelled to float passively on the surface or rest on the ground. A little dazed perhaps by the novelty of the situation, the pioneer in locomotion on this earth may possibly still have waited for its prey in the accustomed manner, but when the prey was just out of reach, the limb or mouth would strive to clutch it—and probably fail. But the limb might give the animal an accidental purchase and impel it towards its prey, and this successfully accomplished, it would thereby gain another enormous advantage. Its descendants would tend to inherit the power of locomotion ; the limb used most often for movement towards its prey would develop as a leg, that for seizing as a claw or arm ; and the attainment of locomotion carries with it a general correlative development, mental progress again follows in the train of physical advance, and an enormous range of specialized functions, tastes, and forms develops from the accidents, the ceaseless competition, and the changing circumstances of this new era of general movement.

Those who would keep clear of the fathomless bog of metaphysics recognize and seek instinctively to avoid the difficulties of an exact definition of consciousness. But if the foregoing brief analysis of consciousness as consequent on the faculty of movement be correct, it would seem to follow that as there are degrees of movement from the wholly passive to the highly active, so there are also degrees of consciousness from the hardly perceptible to the intensely vivid sensation ; and such we know to be the fact not only from the whole record of nature, but also from our own experience, for our state of consciousness varies from time to time with the acuteness of our perceptions. A catarrh dulls consciousness, coffee stimulates, and a toothache distracts it ; a whiff of chloroform annihilates it altogether for a time, and a paralytic stroke may suspend it partially or wholly. Perhaps there is no more affecting anecdote in literature than the story of Samuel Johnson, suddenly rendered speechless by a seizure, testing his mental faculties by making Latin verses, and being thankful that his reason survived unimpaired, because he knew they were bad

verses. He recognized instinctively that his general consciousness might be affected by the loss of any part of the power of movement.

It is the very essence of this hypothesis that these accumulated powers of consciousness resulting from movement are handed on and from time to time enlarged by transmission from parent to offspring. The successive steps may be invisible, but the ladder finally reaches from the mud to the stars, and the ladder of consciousness is heredity. In a wonderful phrase of Dickens it is 'the inappreciable things that raise life from 'the state of conscious death.' But is it the multitudinous accumulation of inappreciable things consequent on the faculty of movement that constitutes the soul? Can it be maintained that this long but lowly ancestry is our true heredity, and that the soul has grown out of the body as the rose grows out of the wood? Has the mere power of locomotion, so natural and instinctive to us that it seems almost synonymous with life itself, been sufficient to develop through the ages consciousness and will from sensation, intellect from consciousness, and that indefinable essence which we call the soul from those derivatives? The loftiest peaks of our achievements, which boldly confront heaven—our philosophy and art, the noble compassion, and the love which disregards life itself when something higher than life is at stake—do these but lead downward by the tangled and overgrown paths of a long-forgotten ancestry through the plane of unconscious vegetation to the ocean that is the careless mother of all living things?

There are great gaps in the stupendous lineage, deep chasms that we cannot easily bridge; but is the ravine altogether impassable, and the soil on one side entirely different in kind as well as in degree from that on the other? We know that it is not altogether so on the physical plane: the hand of a man, the leg of a horse, the paddle of a porpoise, and the wing of a bat, are all constructed on the same pattern, and include similar bones, placed in the same relative positions. Nor can we entirely repudiate the relationship between ourselves and the rest of creation in the mental and emotional sphere. Instances of animal sagacity and devotion are the commonplace of every natural history; and on the darker side of the picture unfortunately the likeness is equally recognizable.

We shudder at the cruelty of a cat in torturing its victim, but have men not systematically devised tortures for their enemies? Birds will desert their young when the season for migration comes, and other animals devour their offspring under stress of danger; but cannibalism, exposure, and infanticide have also been common among men, and even in England there is a Society for the Prevention of Cruelty to Children. Animals will stare and smell with apparent indifference at the body of a dead comrade: we call it callousness, although we do not in fact know what emotion the beast may feel. But savages are not more sensitive. Bates on the Amazon saw a woman laugh at the description of the eating of her own husband by the very girl who had joined in the horrible feast. Animals, again, will drive old and feeble members from the herd; but savage tribes sacrifice their old women before the dogs in times of famine.

One considerable difference indeed there is between the brutes and ourselves: most animals only enslave and prey on other species; man enslaves and preys on his own kind as well. But whether that is a difference which demonstrates the innate superiority of the human soul I leave to others to determine.

It has been suggested that one fundamental distinction between human beings and the brute creation consists in the ordered government and polity of our society; and it is in fact true that the law of the jungle which Kipling describes is no more than a poetic fancy. There is no interspecies law, so to speak, or general league of nations among the animals—and our own efforts in that direction have not yet become particularly impressive.

But the social organization of the inferior orders cannot be so summarily dismissed. On the obscure frontiers of the animal and vegetable world it is extremely difficult to say what is an individual, but it will hardly be contended that there is a society, since society seems necessarily to consist of the co-operation of individuals with indisputably independent existences. It would be an abuse of language to say that a polypus formed a society, and if human beings were all joined together like Siamese twins it is hard to see how there could be a society. But societies clearly vary according to the needs of the several individuals composing

them. A high degree of discipline seems requisite for at least certain families of ants and bees; the intensely egoistic cat is one of the most solitary animals in the world, and its conception of society can differ little from that of a hermit, or at least that of a club where every member has the right to the best chair and compulsory silence; wasps, on the other hand, sometimes form a society and sometimes prefer solitude.

Unfortunately we are as yet only on the threshold of enquiry into the question of animal consciousness. Philosophers and naturalists still alternately amuse and exasperate themselves and others with definitions of a distinction between instinct and intelligence, sense and soul; but neither philosopher nor naturalist can define the boundary or agree as to the shadowy hinterland of those debatable territories. It is notoriously difficult enough to read another man's mind; how much more difficult then must it be to read the mind of an animal, whose perceptions are different from ours, whose sense-organs do not always correspond or act similarly, and whose whole descent for millions of generations has differed from our own? Yet some advance has been made of late years in this matter. If Romanes' attempt to classify the mental development of animals was hopelessly inadequate, and left one with the uncomfortable feeling that the more intelligent brutes may have been as surprised at the absurdity of the various tricks by which their faculties were tested as the observer was at their failure to mimic human actions, other enquirers have produced more excellent results,* and at least laid the basis of a general and consistent method of investigation.

It has sometimes been denied that animals have memory, and it is still frequently suggested that they are incapable of learning from experience. Both ideas are preposterous. Cats, dogs, horses, and many other animals know their master or keeper instantly; cattle recognize each other, and know members of their own herd out of ten thousand others;† ants possess the same faculty. These facts are inexplicable

* See Thorndike, 'Animal Intelligence,' Lloyd Morgan, 'Animal Behaviour,' and Bateson, 'The Sense-Organs and Perceptions of Fishes,' in the 'Journal of Marine Biological Association' (1890).

† Darwin, 'Voyage of the Beagle.'

without memory; other observations show conclusively that animals are capable of learning from experience. Rengger and Belt were convinced that monkeys possessed this faculty. The crab which discovered by experiment how to tear open a cocoanut showed itself possessed of certain reasoning powers,* and when it repeated the experiment, possessed of memory. I have myself seen a cat jump by mistake into a pond whose surface was covered by water-lilies; the disgusted animal swam ashore, and not only never repeated the experiment, but wisely showed her distrust of such deception by never going near the pond again. If that is not learning from experience I do not know what is.

The fact that bees should be puzzled by glass, and buzz helplessly against a half-closed window, has been cited as a proof of lack of intelligence and inability to profit from experience. But glass is a thing utterly outside the normal experience of a bee, a cold, invisible barrier inexplicable in the ordinary way of nature. A pike, which is certainly less intelligent than a bee, learnt in time not to dash itself against the glass partition of its aquarium; probably if every bee, instead of perhaps one in ten thousand, encountered glass windows every day, the race would learn how to deal with the window problem. But is the bee in this case really less intelligent than the schoolboy confronted with some monstrous geometrical problem which dulls his brain? It does not need much knowledge of history to demonstrate that mankind does not always profit immediately from experience.

Even relatively low organisms are by no means devoid of intelligence. Darwin noticed that the cuttlefish is conscious of impending danger—and only those who profit by experience can learn caution. The common worm, although in some ways constituted like the plant—it is blind and deaf, it breathes through its sides instead of lungs, and it subsists on earth—possesses faculties that are by no means contemptible.

The development of language is rightly claimed as one of the supreme achievements of the intellect, and it has been plausibly maintained that it is the possession of this power which most clearly marks the stupendous chasm between man and the brute creation.

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* Darwin, 'Voyage of the Beagle.'

But the general argument that language is the sole prerogative of man can only be maintained with very considerable qualifications. The debates of rooks and the chatter of monkeys are proverbial; few that have watched a cat calling, encouraging, and scolding her kittens will deny that sagacious beast some power of speech; and it is certain that sounds which are audible to other species fail to reach our ears. That the dumb animals are dumb to us may be the fault, or perhaps the merit, of our limited hearing. 'If our ears were sharp enough 'to hear all the cries of pain that are uttered on the earth by 'men and beasts, we should be deafened by one continuous 'scream.' * It is more than probable, too, that many animals communicate their thoughts to each other by other means than speech—by touching their antennæ, rubbing noses, and other significant gestures. There is, in fact, no particular reason why the tongue instead of the hand or foot should be the specialized means of communication. Nor is the language of touch and sight confined to animals: if lovers were analytical philosophers many interesting volumes would have been written on the conjugation of hands and lips, and the cinema frankly recounts its breathless stories without resort to words. Music likewise transcends speech; but he would be a wise man who could explain why the soul should be so deeply stirred by the inarticulate vibrations of a metal string or a strip of catgut.

It is probable that we may have to revise our estimate of animal intelligence very considerably when we come to consider their emotions, as distinct from their more utilitarian mental faculties. Few would dispute Chaucer's dictum that 'pity springeth soon in gentle heart,' but animals have been seen to pity the distress of other animals, and to show kindness to each other. The spectacle of maternal affection and self-sacrifice in human beings has justly inspired our greatest poets and our most exquisite artists, but an animal might plausibly maintain that this was a proof of the essential egoism of man: since no painter has yet immortalized the love of the baboon for its offspring, and our bards have forgotten that the humble earwig shares with Rachel the sacred passion for her young.

Most of us have seen a cat sneer, even at ourselves, and felt

* Huxley; cf. Romans viii. 22.

our dignity shrink accordingly ; and although the proverbial cat that laughs has yet to be found, I have had the privilege of intimate and affectionate friendship with more than one cat that indubitably smiled contentedly when it secured the most comfortable place in the room. A respectable, and I trust orthodox, clergyman has expressed the belief that the dog, at least his dog, has a soul, while Darwin contended that it had both a conscience and a sense of humour—qualities not universally found in man. Certainly the dog, and not the dog only, can show the whole gamut of the emotions—pity, affection, terror, wistfulness—as well as many men.

We still lack knowledge of these matters ; but should any country rector become sufficiently weary of the stolidity of his congregation—there must be many such—to devote his major attention to an investigation of the mental functions and capacities of beetles and caterpillars in the manner that Darwin investigated the habits of the earthworm, he might make a very important contribution to the study of comparative consciousness. If the old alchemists had occupied themselves with the living world instead of the dead, they might have discovered the mutability of species instead of failing in the search for the transmutation of metals ; and the road to success in the study of human and animal psychology is now clearly seen to lie in the observation of daily life. If man, in the memorable words of St. Augustine, cannot expect to define the Creator without more knowledge of the creation, neither can he hope to probe the secrets of life without knowledge of its manifestations.

It is at least strictly in accordance with the hypothesis of consciousness deriving from movement that in human beings movement precedes consciousness by some months, and consciousness usually ceases some time before physical death—which, except in sudden or violent ends, is seldom the death of the novel or the drama, but an altogether slower and more gradual process. The noble adieus of Antony and Hotspur in fact rarely happen off the stage, and the soul bids often an irrelevant farewell.

The hypothesis also postulates that sensitiveness or irritability precedes the power of movement and its derivative consciousness, and should therefore survive it ; and in fact we find that a child's limbs are sensitive long before their use

is learnt, and that in prolonged illness the normal faculty of movement diminishes through weakness or disease to mere irritability of the muscles; while paralysis, which involves temporary or partial suspension of movement, is demonstrably connected with the human consciousness.

In sleep, too, consciousness is suspended before movement ceases, as anyone can see who watches a restless sleeper; and movement usually returns some few seconds before consciousness comes back with waking. But the great mystery of sleep illustrates another side of the question, for it was probably the dim wonders of the grey shadowland of dreams which first persuaded man that he had a soul independent of the body. Many savage tribes hold that it is unlucky to wake a sleeper suddenly, and highly dangerous to move a sleeper, since in the first case the soul may not have time to return to the body, and in the second may be unable to find it at all. It does not seem to have occurred to them that the individual soul that wandered, or seemed to wander, remained always a solitary individual. We meet and converse with the shadows of the dead, and it cannot be disproved that we have spoken with a departed soul; but we also meet and converse with the shadows of the living, and they know nothing of it. If the conversation had actually taken place, both would presumably have remembered it; the fact that the dream-spirit does not meet other dream-spirits in its supposed wanderings shows that the soul does not actually leave the body when it dreams.

It must, of course, be frankly admitted that there are many grave objections to this hypothesis. The bold doctrine that the spiritual essence of man was created directly by God before time began clearly goes to the very root of the questions of heredity and consciousness; but it may have raised no serious dissent in the circles which first read the Epistle to the Ephesians. The Greeks, and not the Greeks only, were familiar with the idea of pre-existence. The great Jewish writers held substantially the same view. And the disciples of Christ, who are not usually reckoned among the psychologists, raised the profoundly philosophical question whether a man afflicted by blindness had sinned before his birth in a manner which showed they had no doubt of the possibility of pre-natal sin, and therefore of the existence of pre-natal individuality.

The same disciples who recognized the possibility of prenatal individuality suggested as an alternative that the sufferer might be afflicted for the sins of his parents. They received no conclusive answer at that hour; but the axiom that men do not gather figs of thistles directly supports the belief in heredity, in the same way that the teaching of 'many 'are called, but few chosen,' may be said to foreshadow its intimate ally, natural selection. And St. Paul himself, who raised the noble standard of direct descent from God, and thereby gave the humblest individual as proud an ancestry as the greatest of kings, admitted the doctrine of predestination, which is in effect a theological rendering of the familiar scientific theory of heredity.

Between those opposite conceptions, the practice of Christian States, and to some extent the teaching of Christian Churches, has oscillated for nineteen centuries, and in few matters has that contradictory animal, man, shown himself more contradictory than in his attitude towards the question of his origin. If a man, in the common phrase, can call his soul his own, and in the pious language of our ancestors 'render up his spirit to God Who gave it,' yet the pride of long descent has taken root in every society which has the necessary foundations of relative stability and inequality, the doctrine of divine right inevitably involves the necessity of hereditary succession, deposed kings are followed into exile by banished sons, the belief in tainted blood has attracted dramatists from Sophocles to Ibsen, and the shame of bastardy is universal. If the soul derives directly and solely from its Creator, why should these things be?

In secular practice the Pauline doctrine has been perhaps more honoured in the breach than the observance. But our ignorance of spiritual embryology has given rise to many curious varieties of belief in hereditary influence. 'A chip 'of the old block,' and 'like father, like son,' have not only become integral pieces of that consecrated folly which we call proverbial wisdom: they have even been elevated into a specific theory. The extraordinary view was long maintained that the male was not merely the dominant, but the only, element in parenthood; the mother was simply the pipe, as it were, through which the stream of life flowed, having no more influence on the child she carried than the aqueduct

on water. How so absurd a notion could have survived a day in face of the obvious fact that children are often more like their mother than their father is difficult to understand, until one remembers that stupidities, like other low organisms of nature, possess a most astonishing vitality. The idea possibly arose originally in the mind of some chief who wished a natural son to succeed him; it was certainly fostered by the low opinion of woman in barbaric society. But it inspired one of the heresies of the incarnation controversy; it appeared again and again in the interminable discussions on the law of inheritance in the Middle Ages, and Johnson's Boswell was one of the last fanatical upholders of the egregious doctrine of heirs male.

If the father were the only element in parenthood, there could be no danger in mixed marriages. Yet the statute-books of many English colonies have recorded legislation against mixed marriages of different races; the sentiment against such unions is strong even where the laws are silent, and the prejudice against the offspring is notorious. The half-breed is proverbially fickle and the mulatto untrustworthy; books have been written to show that the disposition of the human hybrid is degenerate, and deficient in the good qualities of both his ancestors. It is recognized that cross-breeding modifies the characters of horses and dogs, and human beings tacitly admit that similar consequences affect their offspring. But on the assumption that the soul derives solely from the Creator, it is independent of its human parentage.

But society is no more consistent in these matters than in its lesser conventions. Robbery and murder are happily not hereditary professions; but the ancestry of the criminal in the dock cannot be pleaded in extenuation or advanced in proof of his crime. The murderess is respited until her child is born; and the substitution of transportation for the capital punishment of secondary offences in the old penal days, in so far as it rested on a philosophical basis, was a tacit admission that circumstances, not origin, had made the criminal, and a change of circumstances might make a better citizen.

This general confusion of thought and practice is significant of our present ignorance of the working of heredity, and the

extent to which circumstance, environment, and accident influence destiny. The plain commonsense of mankind tells them that breed counts—a thousand unconscious tricks of manner and speech, a shrug of the shoulder, the timbre of the voice, and family likenesses, are within everybody's knowledge. But if breed counts it does not count for everything. The tastes and dispositions of members of a family often vary in the most astonishing manner, and a recent attempt to reduce these factors to a system resulted in conspicuous failure.

Galton's curious researches, stimulating as they have proved, suffered from serious limitations in his conception of heredity. That the son of a successful lawyer should be a lawyer, the son of a bishop sometimes become a clergyman, and the son of an admiral enter the navy may often be the fact; but it does not necessarily prove anything for heredity. The example of a parent successful in his sphere of life may easily be more potent than heredity; in particular the peculiarly cultivated and spiritual atmosphere of a country rectory—when the conditions of the father's life usually render him more accessible to his children than men engaged in other avocations—must often operate with very considerable force through the impressionable years. The faculty of imitation, so strong in children, may easily become second nature and be wrongly attributed to heredity.

It is possible, of course, and perhaps even probable, that talent is transmitted, and it is as nearly certain as anything can be that breed counts among men as among animals, despite Tess of the d'Urbervilles and other examples of degeneration. But it is very doubtful if specific talent descends from parent to child; it is far more likely that what is transmitted is a general tendency to excel—the son of the author becoming an engineer, the son of the judge a distinguished doctor. But even this supposition is liable to innumerable exceptions, and perhaps little more can be maintained than that the children of the successful parent generally possess a natural advantage in superior upbringing and a better start in life than the children of the less successful. But this is hardly heredity in the larger sense of the word, and the success of the Barnardo Homes is a most impressive argument against applied eugenics.

Even more serious factors are entirely ignored by Galton. He attempts to show that an artist's son tends to become an artist, a poet's son a poet, forgetting the notorious fact that Shakespeare was the son of a tradesman, Shelley of a country gentleman, Swinburne of a sailor, the Tennyson brothers of a clergyman, and Matthew Arnold—who was considered a poet in Galton's time—the son of a schoolmaster. None of these occupations can be considered as the necessary progenitors of poetry; nor did those of these poets who had children transmit their divine faculty to their offspring. Genius, in fact, escapes Galton's tape-measure method altogether. There have been thousands of provincial aldermen, but only one provincial alderman in one obscure city has had Shakespeare for a son. There were thousands of Dorrits and Micawbers in the Marshalsea, but only one debtor in that dreadful prison had Charles Dickens for a son. And if the hypothesis had been practically reliable, Napoleon would surely have been born at Versailles of a long line of kings; he came of commonplace parentage in an island not otherwise remarkable for great men.

It must be admitted that our investigations into the subconscious mind of man are still in a rudimentary stage, and it is more than possible that we may find this has some bearing in questions of heredity; the child may inherit qualities which the parent only possesses subconsciously, or qualities from a remoter ancestor which have lain dormant for more than one generation may suddenly light up through a spark from some extraneous source. We know very little of the reasons which give one physical type potency over another, less of the causes of variation, and still less of the subtle combinations in parenthood which influence these tendencies. It is almost certainly true that there is a direct heredity of the soul as well as the body, but our spiritual heraldry as laid down by Galton is unconvincing, and the spreading roots of that genealogical tree are at present buried far beneath the physical soil.

The Christian Church has been more consistent in its attitude and more faithful to its original doctrine than secular society, and its simple axiom that 'It is He that hath 'made us, and not we ourselves'—which is not merely sound theology, but may prove sound practical statecraft in our

present ignorance—has been accepted by the faithful as a full and final revelation of the great mystery. Many religions, from Palestine to Bengal and Fiji, have had hereditary castes of priests, but Christianity in its own order has always repudiated the descent which it has tolerated or encouraged in the State. The belief in apostolic succession may have developed the pride of caste, but it has had the perhaps unmeditated consequence of keeping the Church open to every class of man—an attitude necessarily stereotyped by the celibacy of the clergy, that most unexpected buttress of democracy. Not the most corrupt sect in the most corrupt period has ever dared to suggest that the grace of God was hereditary in its visitation. Even the son of the thief and the prostitute might sit in the seat of the Vicar of Christ and hold the keys of heaven.

That is a noble and inspiring attitude, which alone goes far to justify the claim that Christianity is the creed of hope and the ally of human freedom. But whatever its attitude towards heredity, religion itself has recognized in one respect the major hypothesis that consciousness depends on movement, for it teaches that only when the soul is released from the shackles which hamper its movement in the flesh does it attain its full development. That question lies far beyond the scope of this enquiry, but this at least may be said, that as by the hypothesis life has developed from no life, and will, irritability, and consciousness from life, and the soul and its emotions and achievements from these perhaps irrelevant extensions of irritability, so it might conceivably be argued that consciousness would in time so far transcend its origin as to survive the sources from which it derived, and that the gradual emergence of a belief in immortality might mark the slow emergence of the soul from the physical bond from which it sprang.

It will be said, no doubt, that the general hypothesis considered in these pages is base and material—few theories escape that easy appeal to prejudice. But indeed it is not so; for it implicitly denies that man is nothing but a drifting snowflake which glitters brightly in the sun for one brief moment as it melts; it shows that he has risen far above his lowly origin. It is true that he has to share the earlier stages of that rise with others who have advanced less

high in the ascending scale, and that he still bears the marks, gross and palpable, of his emergence from the dust; but it indicates, what one may hope to be the truth, that the long chain of evolution is not ended, and that he may yet ascend still further to heights which now seem not only beyond his reach but even beyond his ken. Progress may not be, and indeed does not seem to be, as Lamarck and many of his contemporaries thought, the inevitable law of life; but whether by accident or by some mysterious guiding power, which we term providence, progress has been made. And therefore it is a hypothesis of hope, and the human race, which has risen so far above its source, may even now be only in the first flush of youth—for still

> 'The Will rolls onward, like a wheel
> In motion, by the love impelled
> That moves the sun in heaven and all the stars.'

A. Wyatt Tilby.

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THE FUTURE OF THE ENGLISH RACE*

1. **The Task of Social Hygiene.** By HAVELOCK ELLIS. Constable. 1912.
2. **Essays in War Time.** By HAVELOCK ELLIS. Constable. 1916.
3. **The Laws of Heredity.** By G. ARCHDALL REID. Methuen. 1910.
4. **The Registrar-General's Annual Reports.**

IN the year 1890 Sir Charles Dilke ended his survey of 'Greater Britain' and its problems with the prediction that 'the world's future belongs to the Anglo-Saxon, the 'Russian, and the Chinese races.' This was in the heyday of British imperialism, which was inaugurated by Seeley's 'Expan-'sion of England,' and Froude's 'Oceana,' and which inspired Mr. Chamberlain to proclaim at Toronto in 1887 that the 'Anglo-Saxon stock is infallibly destined to be the predominant 'force in the history and civilisation of the world.' It was an arrogant, but not truculent, mood which reached its climax at the 1897 Jubilee, and rapidly declined during and after the Boer war. These writers and statesmen were utterly blind to the German peril, though the disciples of Treitschke were already working out a theory about the future destinies of the world, in which neither Great Britain nor Russia nor China counted

* The English Race, of course, means the inhabitants of this island, and their descendants overseas. We are no more 'Britons' than the New Zealanders are Maoris.

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for very much. There were illusions on both sides of the North Sea, which had to be paid for in blood. In both countries imperialism was a sentiment curiously compounded of idealism and bombast, and supported by very doubtful science. In the case of Germany the distortion of facts was deliberate and monstrous. Not only was every schoolboy brought up on cooked population statistics and falsified geography, but the thick-set, brachycephalous Central European persuaded himself that he belonged to the pure Nordic race, the great blond beasts of Nietzsche, which, as he was taught, had already produced nearly all the great men in history, and was now about to claim its proper place as master of the world. Political anthropology is no genuine science. Race and nationality are catchwords for which rulers find that their subjects are willing to fight, as they fought for what they called religion four hundred years ago. In reality, if we want to find a pure race, we must visit the Esquimaux, or the Fuegians, or the Pygmies; we shall certainly not find one in Europe. Our own imperialists had their illusions too, and we are not rid of them yet, because we do not realise that the fate of races is decided, not in the council-chamber or on the battle-field, but by the same laws of nature which determine the distribution of the various plants and animals of the world. It may be that by approaching our subject from this side we shall arrive at a more scientific, if a more chastened, anticipation of our national future than was acceptable to the enthusiasts of expansion in the last twenty years of Queen Victoria's reign.

The history of the world shows us that there have been three great human reservoirs which from time to time have burst their banks and flooded neighbouring countries. These are the Arabian peninsula, the steppes of Central Asia, and the lands round the Baltic, the original home of the Germanic and Anglo-Saxon peoples. The invaders in each case were pastoral folk, who were driven from their homes by over-population, or drought and famine, or the pressure of enemies behind them. It is easy for nomads to 'trek,' even for great distances: and till the discovery of gunpowder they were the most formidable of foes. The Arabs and Northern Europeans have founded great civilisations; the Mongol hordes have been an unmitigated curse to humanity. The invaders never kept their blood pure. The famous Jewish nose is probably Hittite,

and certainly not Bedouin. There are no pure Turks in Europe, and the Hungarians have lost all resemblance to Mongols. The modern Germans seem to belong mainly to the round-headed Alpine race, which migrated into Europe in early times from the Asiatic highlands. In England there is a larger proportion of Nordic blood, because the Anglo-Saxons partially exterminated the natives; but the old Mediterranean race, which had made its way up the warm western coasts, still holds its own in Cornwall, Wales, Ireland, and the Western Highlands; and within the last hundred years, owing to frequent migrations, has mixed so thoroughly with the Anglo-Saxon stock that the English are becoming darker in each generation. This is not the result of a racial decay of the blonds, as the American, Dr. Charles Woodruff, supposes, but is to be accounted for by the fact that dark eyes seem to be a Mendelian dominant, and dark hair a more potent character than light. The inhabitants of these islands are nearly all long-headed, this being a characteristic of both the Nordic and Mediterranean races. The round-headed invaders, who perhaps brought with them the so-called Celtic languages at a remote period, and imposed them upon the inhabitants, seem to have left no other mark upon the population, though their type of head is prevalent over a great part of France.

The ability of races to flourish in climates other than their own is a question of supreme importance to historians and statesmen, and, it need not be said, to emigrants. But it is only lately that it has been studied scientifically, and the results are still tentative. German ethnologists, of what we may call the *œdicephalous* school, already referred to, regard it as one of the tragedies of nature that the noble Nordic race, to which they think they belong, dies out when it penetrates southwards, though before vanishing it imposes upon the degenerate southerners a type of culture far superior to anything that they could have acquired for themselves. There is thus a sacrificial aspect in the German craving for expansion. The glorious Aryan may rule the south for a time, but he has no continuing city there, and after his departure the old races, regaining their predominance, sink again into the insignificance which is proper to them. In accordance with this law, the yellow-haired Achæans decayed in Greece, the Lombards in North Italy, the Vandals in Spain and Africa. After a few generations of life in a warm

climate the Aryan stock invariably disappears. We shall show reasons for thinking that this theory is much exaggerated; but there is undoubtedly some truth in it. It has been found to be impossible for white men to colonise India, Burma, tropical America, and West Africa. It has been said that 'there is in 'India no third generation of pure English blood.' It is notoriously difficult to bring up even one generation of white children in India. The French cannot maintain themselves without race admixture in Martinique and Guadaloupe, nor the Dutch in Java, though it is said that the expectation of life for a European in Java is as good as in his own country. It seems to be also true that the blond race suffers most in a hot climate. In the Philippines it was observed that the fair-haired soldiers in the American army succumbed most readily to disease. In Queensland the Italian colonists are said to stand the heat better than the English, and Mr Roosevelt, among other items of good advice which he bestowed so liberally on the European nations, advised us to populate the torrid parts of Australia with immigrants from the Latin races. In Natal the English families who are settled in the country are said to be enervated by the climate; and on the high plateaux of the interior our countrymen find it necessary to pay periodical visits to the coast, to be unbraced. The early deaths and not infrequent suicides of Rand magnates may indicate that the air of the Transvaal is too stimulating for a life of high tension and excitement. There are even signs that the same may be true in a minor degree of the United States of America. Both the capitalist and the working man, if they come of English stock, seem to wear out more quickly than at home; and the sterility of marriages among the long settled American families is so pronounced that it can hardly be due entirely to voluntary restriction of parentage. The effects of an unsuitable climate are especially shown in nervous disorders, and are therefore likely to tell most heavily on those who engage in intellectual pursuits, and perhaps on women rather more than on men. The sterilising effects of women's higher education in America are incontrovertible, though this inference is hotly denied in England. At Holyoake College it was found that only half the lady graduates afterwards married, and the average family of those who did marry was less than two children. At Bryn Mawr only 43 per cent. married, and had 0.84 children each; the average family per

graduate was therefore 0.37. If it be objected that new immigrants and their children are healthy and vigorous in America, it may be truly answered that the effects of an unfavourable climate are manifested fully only in the third and later generations. The argument may be further supported by the fate of black men who try to settle in Europe. Their strongly pigmented skin, which seems to protect them from the actinic rays of the tropical sun, so noxious to Europeans, and their broad nostrils, which inhale a larger number of tubercle bacilli than the narrow nose-slits of the Northerner, are disadvantages in a temperate climate. In any case, of the many thousands of negro servants who lived in England in the eighteenth century, it would be difficult to find a single descendant.

But there are other factors in the problem which should make us beware of hasty generalisations. It is obvious that since the American Republic contains many climates in its vast area, there may be parts of it which are perfectly healthy for Anglo-Saxons, and other parts where they cannot live without degenerating. Very few athletes, we are told, come from south of the fortieth parallel of latitude. But the decline in the birth-rate is most marked in the older colonies, the New England States, where for two hundred years the English colonists, living mainly on the land, not only throve and developed a singularly virile type of humanity, but multiplied with almost unexampled rapidity. The same is true not only of the French Canadian farmers, but of the South African Boers, who rear enormous families in a climate very different from that of Holland. The inference is that Europeans living on the land may flourish in any tolerably healthy climate which is not tropical.

There are, in fact, two other causes besides climate which may prevent immigrants from multiplying in a new country. The first of these is the presence of microbic diseases to which the old inhabitants are wholly or partially immune, but which find a virgin soil in the bodies of the newcomers. The strongest example is the West Coast of Africa, of which Miss Mary Kingsley writes: 'Yet remember, before you elect to cast your 'lot with the West Coasters, that 85 per cent. of them die of 'fever, or return home with their health permanently wrecked. 'Also remember that there is no getting acclimatised to the 'Coast. There are, it is true, a few men out there who, although

'they have been resident in West Africa for years, have never 'had fever, but you can count them on the fingers of one hand.' There can be no acclimatisation where the weeding out is as drastic as this. Either the anopheles mosquito or the European must quit. There are parts of tropical America where the natives have actually been protected by the malaria, which keeps the white man at arm's length. But more often the microbe is on the side of the civilised race, killing off the natives who have not run the gauntlet of town-life. The extreme reluctance of the barbarians who overran the Roman Empire to settle in the towns is easily accounted for if, as is probable, the towns killed them off whenever they attempted to live in them. The difference is remarkable between the fate of a conquered race which has become accustomed to town-life, and that of one which has not. There are no 'native quarters' in the towns of any country where the aborigines were nomads or tillers of the soil. To the North American Indian, residence in a town is a sentence of death. The American Indians were accustomed to none of our zymotic diseases except malaria. In the north they were destroyed wholesale by tuberculosis; in Mexico and Peru, where large towns existed before the conquest, they fared better. Fiji was devastated by measles; other barbarians by small-pox. Negroes have acquired, through severe natural selection, a certain degree of immunisation in America; but even now it is said that 'every other negro dies of con-'sumption.' There are, however, two races, both long accustomed to town-life under horribly insanitary conditions, which have shown that they can live in almost any climate. These are the Jews and the Chinese. The medieval Ghetto exterminated all who were not naturally resistant to every form of microbic disease; the modern Jew, though often of poor physique, is hard to kill. The same may be said of the Chinaman, who, when at home, lives under conditions which would kill most Europeans. These considerations lead us to the conclusion that the pessimistic theory, according to which the Nordic race is limited to climates resembling that of North Europe, is not proved. A race that has survived the town-life of England in the days before drains and dustmen can live anywhere except in the tropics.

The other factor, which is really promoting the gradual disappearance of the Anglo-Saxons from the United States, is of a very different character. The descendants of the old

immigrants are on the whole the aristocracy of the country. Now it is a law which hardly admits of exceptions, that aristocracies do not maintain their numbers. The ruling race rules itself out; nothing fails like success. Gibbon has called attention to the extreme respect paid to long descent in the Roman Empire, and to the strange fact that, in the fourth century, no ingenuity of pedigree makers could deny that all the great families of the Republic were extinct, so that the second-rate plebeian family of the Anicii, whose name did not appear in the Fasti, enjoyed a prestige far greater than that of the Howards and Stanleys in this country. Our own peerage consists chiefly of parvenus. Only six of our noble families, it is said, can trace their descent in the male line without a break to the fifteenth century. The peerage of Sweden tells the same tale. According to Galton, the custom or law of primogeniture, combined with the habit of marrying heiresses who, as the last representatives of dwindling families, tend to be barren, is mainly responsible for this. Additional causes may be the greater danger which the officer-class incurs in war, and, in former times, the executioner's axe. In our own day the reluctance of rich and self-indulgent women to bear children is undoubtedly a factor in the infertility of the leisured class.

This brings us naturally to the second part of our discussion —the consideration of the causes which lead to the increase or decrease of population. It is the most important part of our inquiry; for it is usually assumed that the British Isles will continue to send out colonists in large numbers, as it did in the last century, and the hopes of the imperialist that a large part of the world will speak English for all time depend on the untested assurance that the swarming-time of our race is not yet over. Our starting-point must be that the pressure of population upon the means of subsistence is a constant fact in the human race, as in every other species of animals and plants. There is no species in which the numbers are not kept down, far below the natural capacity for increase, by the limitation of available food. It may not always be easy to trace the connection between the appearance of new lives and the passing away of old, nor to say whether it is the birth-rate which determines the death-rate, or the death-rate the birth-rate. But it is well known that, wherever statistics are kept, the numbers of births and of deaths rise and fall in nearly parallel lines, so that the

net rate of increase hardly alters at all, unless some change, which can easily be traced, occurs in the habits of the people or in the amount of the food supply. In civilised countries the greater care taken of human life, and its consequent prolongation, has reduced the birth-rate, just as in the higher mammals we find a greatly diminished fertility as compared with the lower, and a much higher survival-rate among the offspring born. The average duration of life in this country has increased by about one-third in the last sixty years, and the birth-rate has fallen in almost exactly the same proportion. The position of a nation in the scale of civilisation may almost be gauged by its births and deaths. The order in Europe, beginning with the lowest birth-rate, is France, Belgium, Sweden, the United Kingdom, Switzerland, Norway, Denmark, Holland, Germany, Spain, Austria, Italy, Hungary, the Balkan States, Russia. The order of death-rates, again beginning at the bottom, is Holland, Denmark, Norway, Sweden, Switzerland, the United Kingdom, Belgium, Germany, France, Italy, Austria, Serbia, Spain, Bulgaria, Hungary, Roumania, Russia. These two lists, as will be seen, correspond very nearly with the scale of descending civilisation, the only notable exception being the low position of France in the second list. This anomaly is explained by the fact that France having a stationary population, the death-rate in that country corresponds nearly with the mean expectation of life, whereas in countries where the population is increasing rapidly, either by excess of births over deaths or by immigration, the preponderance of young lives brings the death-rate down. We must, therefore, be on our guard against supposing that countries with the lowest death-rates are necessarily the most healthy. In New Zealand, for example, the death-rate is under 10 per 1000, the lowest in the world; and though that country is undoubtedly healthy, no one supposes that the average duration of life in New Zealand is a hundred years. To ascertain whether a nation is long-lived, we must correct the crude death-rate by taking into account the average age of the population. When this correction has been made, a low death-rate, and the low birth-rate which necessarily accompanies it, is a sign that the doctors are doing their duty by keeping their patients alive. If our physicians desire more maternity cases, they must make more work for the undertaker. Large families almost always mean a high infant mortality; and it is significant that a twelfth

child has a very much poorer chance of survival than a first or second. The agitation for the endowment of motherhood and the reduction of infant mortality is therefore futile, because, while other conditions remain the same, every baby 'saved' sends another baby out of the world or prevents him from coming into it. The number of the people is not determined by philanthropists or even by parents. Children will come somehow whenever there is room for them, and go when there is none. But other conditions do not remain the same, and it is in these other conditions that we must seek the causes of expansion or contraction in the numbers of a community.

At the end of the sixteenth century the population of England and Wales amounted to about five millions, and a hundred years later to not much more. There is no reason to think that under the conditions then existing the country could have supported a larger number. The birth-rate was kept high by the pestilential state of the towns, and thus the pressure of numbers was less felt than it is now, since it was possible to have, though not to rear, unlimited families. Occasionally, from accidental circumstances, England was for a short time underpopulated, and these were the periods when, according to Professor Thorold Rogers, Archdeacon Cunningham, and other authorities, the labourer was well off. The most striking example was in the half-century after the Black Death, which carried off nearly half the population. Wages increased threefold, and the Government tried in vain to protect employers by enforcing pre-plague rates. Not only were wages high, but food was so abundant that farmers often gave their men a square meal which was not in the contract. The other period of prosperity for the working man, according to our authorities, was the second quarter of the eighteenth century. It has not, we think, been noticed that this also followed a temporary set-back in the population. In 1688 the population of England and Wales was 5,500,520; in 1710 it was more than a quarter of a million less. The cause of this decline is obscure, but its effects soon showed themselves in easier conditions of life, especially for the poor. Such periods of under-saturation, which some new countries are still enjoying, are necessarily short. Population flows in as naturally as water finds its level. It was not till the accession of George III. that the increase in our numbers became rapid. No one until then would have thought of

singling out the Englishman as the embodiment of the good apprentice. Meteren, in the sixteenth century, found our countrymen 'as lazy as Spaniards'; most foreigners were struck by our fondness for solid food and strong drink. The industrial revolution came upon us suddenly; it changed the whole face of the country and the apparent character of the people. In the far future our descendants may look back upon the period in which we are living as a strange episode which disturbed the natural habits of our race. The first impetus was given by the plunder of Bengal, which, after the victories of Clive, flowed into the country in a broad stream for about thirty years. This ill-gotten wealth played the same part in stimulating English industries as the 'five milliards,' extorted from France, did for Germany after 1870. The half-century which followed was marked by a series of inventions, which made England the workshop of the world. But the basis of our industrial supremacy was, and is, our coal. Those who are in the habit of comparing the progressiveness of the North-Western European with the stagnation or decadence of the Latin races, forget the fact, which is obvious when it has once been pointed out, that the progressive nations are those which happen to have valuable coal fields. Countries which have no coal are obliged to import it, paying the freight, or to smelt their iron with charcoal. This process makes excellent steel—the superiority of Swedish razors is due to wood-smelting—but it is so wasteful of wood that the Mediterranean peoples very early in history injured their climate by cutting down their scanty forests, thereby diminishing their rainfall, and allowing the soil to be washed off the hillsides. The coasts of the Mediterranean are, in consequence, far less productive than they were two thousand years ago. But in England, when the start was once made, all circumstances conspired to turn our once beautiful island into a chaos of factories and mean streets, reeking of smoke, millionaires, and paupers. We were no longer able to grow our own food; but we made masses of goods which the manufacturers were eager to exchange for it; and the population grew like crops on a newly-irrigated desert. During the nineteenth century the numbers were nearly quadrupled. Let those who think that the population of a country can be increased at will, reflect whether it is likely that any physical, moral, or psychological change came over the nation coincidently with the inventions of the spinning-jenny and

the steam engine. It is too obvious for dispute that it was the possession of capital wanting employment, and of natural advantages for using it, that called these multitudes of human beings into existence, to eat the food which they paid for by their labour. And it should be equally obvious that the existence of forty-six millions of people upon 121,000 square miles of territory depends entirely upon our finding a market for our manufactures abroad, for so only are we able to pay for the food of the people. It is most unfortunate that these exports must, with our present population, include coal, which, if we had any thought for posterity, we should guard jealously and use sparingly; for in five hundred years at the outside our stock will be gone, and we shall sink to a third-rate Power at once. We are sacrificing the future in order to provide for an excessive and discontented population in the present. During the present century we have begun to be conscious that our foreign trade is threatened; and so sensitive is the birth-rate to economic conditions that it has begun to curve very slightly downward in relation to the death-rate, instead of descending with it in parallel lines.* This may be partly due to the curtailment of facilities for emigration, owing to the filling up of the new countries. For emigration does not diminish the population of the country which the emigrants leave; it only increases its birth-rate.

We are now in a position to enumerate the causes which actually lead to an increase in the population of a country. The first is an increase in the amount of food produced in the country itself. If the parks and gardens of the gentry were ploughed up or turned into allotments, a few hundred thousands would be added to the population of the United Kingdom, at the cost of one of the few remaining beauties which make our country attractive to the eye. The introduction of the potato into Ireland added several millions of squalid inhabitants to that ill-conditioned island, and when the crop failed, large numbers of them inflicted themselves on the United States, to the detriment of that country. The richest countries to-day are those which produce more food than they require, such as the United States,

* In the small islands round our coast increase has ceased for some decades. The vital statistics of these islands furnish an excellent illustration of automatic adjustment to a state of super-saturation.

Canada, Australia, Roumania, and the Argentine. (We need hardly say that throughout this survey we are using the statistics of the years immediately before the war.) But this state of things cannot last long, for the net increase in such countries is invariably high, either by reason of a very high birth-rate, as in Roumania, or because newcomers flock in to enjoy a land of plenty. Another condition which leads to abnormally rapid increase is found when a civilised nation conquers and administers a backward country, introducing better methods of agriculture, and especially irrigation and the reclamation of waste lands. The alien Government also gives greater security, without raising the standard of living among the natives, since the dominant race usually monopolises the lucrative careers. In this way we are directly responsible for increasing the population of Egypt from seven millions in 1883 to nine and three-quarter millions in 1899, an augmentation which, in the absence of immigration, illustrates the great natural fertility of the human race in the rare circumstances when unchecked increase is possible. Still more remarkable is the rise in the population of Java from five millions in 1825 to twenty-eight and a half millions in the first decade of this century. The cause of this increase is the augmented supply of food combined with a very low standard of living, a combination which is specially characteristic of Asia, where extreme super-saturation exists in India and China. A third cause is the production of goods which can be exchanged for food grown abroad. This exchange, as we have seen, is stimulated by the presence of capital seeking employment. Our large towns are the creation of the capitalist, much more than if he had populated their depressing streets with his own children. Fourthly, a reduction in the standard of living of course makes a larger population possible. The misery of the working class in the generation after the Napoleonic Wars was a condition of the prosperity of our export trade at this period; and conversely, the prosperity of our export trade was necessary to the existence of the new inhabitants. Capitalism is the cause of our dense population; and the proletariat would infallibly cut their own throats by destroying it.

It is an important question whether a crowded population adds to the security of a nation or not. Numbers are undoubtedly of great importance in modern warfare. The French would have been less able to resist the Germans without allies

in 1914 than they were in 1870. But we must not suppose that France could support a much larger population without reducing her standard of living to the point of under-feeding; and an under-fed nation is incapable of the endurance required of first-class soldiers. A nation may be so much weakened in physique by under-feeding as to be impotent from a military point of view, in spite of great numbers; this is the case in India and China. Deficient nourishment also diminishes the day's work. If European and American capital goes to China, and provides proper food for the workmen, we may have an early opportunity of discovering whether the supporters of the League of Nations have any real conscientious objection to violence and bloodshed. We may surmise that the European man, the fiercest of all beasts of prey, is not likely to abandon the weapons which have made him the lord and the bully of the planet. He has no other superiority to the races which he arrogantly despises. Under a régime of peace the Asiatic would probably be his master. To return from a short digression, we must note further that a nation with a low standard has no reserve to fall back upon; it lives on the margin of subsistence, which may easily fail in war-time, especially if much food is imported when conditions are normal. It can hardly be an accident that in this war the nations with a high birth-rate broke up in the order of their fecundity, while France stood like a rock. The sacrifice of comfort to numbers, which we have seen to be possible by maintaining a low standard of living, not only diminishes the happiness of a nation, and keeps it low in the scale of civilisation; it may easily prove to be a source of weakness in war.

The expedients often advocated to encourage denser population—which those who urge them thoughtlessly assume to be a good thing—such as endowment of parenthood, and better housing at the expense of the taxpayer—have no effect except to penalise and sterilise those who pay the doles, for the benefit of those who receive them. They are intensely dysgenic in their operation, for they cripple and at last eliminate just those stocks which have shown themselves to be above the average in ability. The process has already advanced a long way, even without the reckless legislation which is now advocated. The lowest birth-rates, less than half that of the unskilled labourers, are those of the doctors, the teaching profession, and ministers

of religion. The position of this class, intellectually and often physically the finest in the kingdom, is rapidly becoming intolerable, and it is the wastrels who mainly benefit by their spoliation.

The causes of shrinkage in population are the opposites of those which we have found to promote its increase. The production of food may be diminished by the exhaustion of the soil, or by the progressive aridity caused by cutting down woods. The manufacture of goods to be exchanged for food may fall off owing to foreign competition, a result which is sure to follow from a rise in the standard of living, for the labourer then demands higher wages, and consumes more food per head, which of itself must check fertility, since the same amount of food will now support a smaller number. The delusion shared by the whole working class that they can make work for each other, at wages fixed by themselves, is ludicrous; a community cannot subsist 'by taking in each other's washing.' Or the supply of exportable food may fail by the peopling up of the countries which grow it. Any conditions which make it no longer worth while to invest capital in business, or which destroy credit, have the same effect. One of the causes of the decay of the Roman Empire was the drain of specie to the East in exchange for perishable commodities. When trade is declining a general listlessness comes over the industrial world, and the output falls still further. There have been alleged instances of peoples which have dwindled and even disappeared from *taedium vitae*. This is said to have been the cause of the extinction of the Guanches of the Canary Islands; but the symptoms described rather suggest an outbreak of sleeping-sickness.

Paradoxical as it may seem, neither voluntary restriction of births, nor famine, nor pestilence, nor war, has much effect in reducing numbers. Birth-control does not diminish the population; it only lowers the death-rate. France in 1781, with a birth-rate of 39, had much the same net increase as in the years before the war with a birth-rate of 20. The parallel lines of the births and deaths in this country have already been mentioned. Famine and pestilence are followed at once by an increased number of births. India and China, though frequently ravaged by both these scourges, remain super-saturated. Of course, if the famine is chronic, the population must fall to the point where the food is sufficient; and a zymotic disease which has become

endemic may be too strong for the natural fertility of the nation attacked, as has happened to several barbarous races; but an invasion of plague, cholera, or influenza has no permanent effect on the numbers of Europeans. War resembles plague in its action upon population. When, as in the late war, nearly the whole of the able-bodied men were on active service, the loss of population caused by cessation of births is greater than all the fatal casualties of the battle-field. A rough calculation gives the result that twelve million lives have been lost to the belligerent nations by the separation of husbands and wives during the war. And yet it may be predicted that these losses, added to the eight millions or so who have been killed, would be made good in a very few years but for the destruction of capital and credit which the war has caused. If we study the vital statistics of a country like Germany, which has engaged in several severe wars since births and deaths began to be registered, we shall find that the contour-line representing the fluctuations of the birth-rate indicates a steep ravine in the year or years while the war lasted, followed by a hump or high table-land for several years after. In a short time, as far as numbers are concerned, the war is as if it had never been. When we remember that the number of possible fathers is much reduced by casualties, this rise in the birth-rate after a war offers a strong confirmation of the thesis which we have been maintaining, that the ebb and flow of population are not affected by conscious intention, but by increased or diminished pressure of numbers upon subsistence. If the German people, who before the war consumed more food than was good for them, have been habituated by our blockade to a reasonable abstemiousness, we shall have contributed to the eventual increase of the German people, in spite of all their soldiers whom we killed in France, and the civilians whom we starved in Germany. And if our success leads to a greater consumption by our working class our population will show a corresponding decline. Emigration, as we have seen, does not diminish the home population by a single unit; and so, while there are empty lands available for colonisation, it is by far the best method of adding to the numbers of our race.

It should now be possible to form a judgment on the prospects of the Anglo-Saxon race in various parts of the world. In India, Burma, New Guinea, the West Indian Islands, and tropical Africa there is no possibility of ever planting

a healthy European population. These dependencies may grow food for us, or send us articles which we can exchange for food, but they are not, and never can be, colonies of Anglo-Saxons. The prospects of South Africa are very dubious. The white man is there an aristocrat, directing semi-servile labour. The white population of the gold and diamond fields will stay there till the mines give out, and no longer. Large tracts of the country may at last be occupied only by Kaffirs. The United States of America are becoming less Anglo-Saxon every year, and this process is likely to continue, since in unskilled labour the Italian and the Pole seem to give better value for their wages than the Englishman or born American, with his high standard of comfort. In Canada, the temperate part of Australia, New Zealand, and Tasmania the chances for a large and flourishing English-speaking population seem to be very favourable, though in these dominions the high standard of living is a check to population, and in the case of Australasia the possibility of foreign conquest, while these priceless lands are still half empty, cannot be altogether excluded.

Even more interesting to most of us is the future of our race at home. As regards quality, the outlook for the present is bad. We have seen that the destruction of the upper and professional classes by taxation directed expressly against them has already begun, and this victimisation is certain to become more and more acute, till these classes are practically extinguished. The old aristocracy showed a tendency to decay even when they were unduly favoured by legislation, and a little more pressure will drive them to voluntary sterility and extermination. Even more to be regretted is the doom of the professional aristocracy, a caste almost peculiar to our country. These families can often show longer, and usually much better pedigrees than the peerage; the persistence of marked ability in many of them, for several generations, is the delight of the eugenist. They are perhaps the best specimens of humanity to be found in any country of the world. Yet they have no prospects except to be gradually harassed out of existence, like the *curiales* of the later Roman Empire. The power will apparently be grasped by a new highly privileged class, the aristocracy of labour. This class, being intelligent, energetic, and intensely selfish, may retain its domination for a considerable time. It is a matter of course

that, having won its privilege of exploiting the community, it will use all its efforts to preserve that privilege and to prevent others from sharing it. In other words, it will become an exclusive and strongly conservative class, on a broader basis than the territorial and commercial aristocracies which preceded it. It will probably be strong enough to discontinue the system of State doles which encourages the wastrel to multiply, as he does multiply, much faster than the valuable part of the population. We are at present breeding a large parasitic class subsisting on the taxes and hampering the Government. The comparative fertility of the lowest class as compared with the better stocks has greatly increased, and is still increasing. The competent working-class families, as well as the rich, are far less fertile than the waste products of our civilisation. Dr. Tredgold found that 43 couples of the parasitic class averaged 7.4 children per family, while 91 respectable couples from the working class averaged only 3.7 per family. Mr. Sidney Webb examined the statistics of the Hearts of Oak Benefit Society, which is patronised by the best type of mechanic, and found that the birth-rate among its members has fallen 46 per cent. between 1881 and 1901 ; or, taking the whole period between 1880 and 1904, the falling off is 52 per cent. This decline proves that the period of industrial expansion in England is nearly over. It would be far better if our birth-rate were as low as that of France, as it would be but for the reckless propagation of the 'submerged tenth.' England being now a paradise for human refuse, the offscourings of Europe (170,000 in 1908) take the place of the better stocks, whose position is made artificially unfavourable. These doles are at present paid by the minority, and this method may be expected to continue until the looting of the propertied classes comes to an enforced end. This will not take long, for it is certain that the amount of wealth available for plunder is very much smaller than is usually supposed. It is easy to destroy capital values, but very difficult to distribute them. The time will soon arrive when the patient sheep will be found to have lost not only his fleece but his skin, and the privileged workman will then have to choose between taxing himself and abandoning socialism. There is little doubt which he will prefer. The result will be that the festering sore of our slum-population will dry up, and the gradual disappearance of the wastrel will soon be some compensation, from the eugenic

point of view, for the destruction of the intellectual class. This process will considerably, and beneficially, diminish the population: and there are several other factors which will operate in the same direction. High wage industry can only maintain itself against the competition of cheaper labour abroad by introducing every kind of labour-saving device. The number of hands employed in a factory must progressively diminish. And as, in spite of all that ingenuity can do, the competition of the cheaper races is certain to cripple our foreign trade, the trade unions will be obliged to provide for a shrinkage in their numbers. We may expect that every unionist will be allowed to place one son, and only one, in the privileged corporation. A man will become a miner or a railwayman 'by patrimony,' and it will be difficult to gain admission to a union in any other way. The position of those who cannot find a place within the privileged circle will be so unhappy that most unionists will take care to have one son only. Another change which will tend to discourage families will be the increased employment of women as bread-winners. Nothing is more remarkable in the study of vital statistics than the comparative birth-rates of those districts in which women earn wages, and of those in which they do not. The rate of increase among the miners is as great as that of the reckless casual labourers, and the obvious reason is that the miner's wife loses nothing by having children, since she does not earn wages. Contrast with these high figures (running up to 40 per thousand) the very low birth-rates of towns like Bradford, where the women are engaged in the textile industry and earn regular wages in support of the family budget. If the time comes when the majority of women are wage-earners, we may even see the pressure of population entirely withdrawn. Thus in every class of the nation influences are at work tending to a progressive decrease in our national fertility. It must be remembered, however, that at present the annual increase is no less than 9 or 10 per thousand, so that it may be some time before an equilibrium is reached. But if our predictions are sound, a positive decrease, and probably a rapid one, is likely to follow. For our ability to exchange our manufactures for food will grow steadily less, as the self-indulgent and 'work-shy' labourer succeeds in gaining his wishes. If the coal begins to give out, the retreat will become a rout.

We are witnessing the decline and fall of the social order which began with the industrial revolution 160 years ago. The cancer of industrialism has begun to mortify, and the end is in sight. Within 200 years, it may be—for we must allow for backwashes and cross-currents which will retard the flow of the stream—the hideous new towns which disfigure our landscape may have disappeared, and their sites may have been reclaimed for the plough. Humanitarian legislation, so far from arresting this movement, is more likely to accelerate it, and the same may be said of the insatiate greed of our new masters. It is indeed instructive to observe how cupidity and sentiment, which (with pugnacity) are the only passions which the practical politician needs to consider, usually defeat their own ends. The working man is sawing at the branch on which he is seated. He may benefit for a time a minority of his own class, but only by sealing the doom of the rest. A densely populated country, which is unable to feed itself, can never be a working man's paradise, a land of short hours and high wages. And the sentimentalist, kind only to be cruel, unwittingly promotes precisely the results which he most deprecates, though they are often much more beneficial than his own aims. The evil that he would he does not; and the good that he would not, that he sometimes does.

For, much as we must regret the apparently inevitable ruin of the upper and upper middle classes, to which England in the past has owed the major part of her greatness, we cannot regard the trend of events as an unmixed misfortune. The industrial revolution has no doubt had some beneficial results. It has founded the British Empire, the most interesting and perhaps the most successful experiment in government on a large scale that the world has yet seen. It has foiled two formidable attempts to place Europe under the heel of military monarchies. It has brought order and material civilisation to many parts of the world which before were barbarous. But these achievements have been counterbalanced by many evils, and in any case they have done their work. The aggregation of mankind in large towns is itself a misfortune; the life of great cities is wholesome neither for body nor for mind. The separation of classes has become more complete; the country may even be divided into the picturesque counties where money is

spent, and the ugly counties where it is made. Except London and the sea-ports, the whole of the South of England is more or less parasitic. We must add that in the early days of the movement the workman and his children were exploited ruthlessly. It is true that if they had not been exploited they would not have existed; but a root of bitterness was planted which, according to what seems to be the law in such cases, sprang up and bore its poisonous fruit about two generations later. It is a sinister fact that the worst trouble is now made by the youngest men. The large fortunes which were made by the manufacturers were not, on the whole, well spent. Their luxury was not of a refined type; literature and art were not intelligently encouraged; and even science was most inadequately supported. The great achievements of the nineteenth century in science and letters, and to a less degree in art, were independent of the industrial world, and were chiefly the work of that class which is now sinking helplessly under the blows of predatory taxation. Capitalism itself has degenerated; the typical millionaire is no longer the captain of industry, but the international banker and company promoter. It is more difficult than ever to find any rational justification for the accumulations which are in the hands of a few persons, who are sometimes too much like the robber barons of the Middle Ages. It is not to be expected that the working class should be less greedy and unscrupulous than the educated; indeed it is plain that, now that they realise their power, they will be even more so. In some ways the national character has stood the strain of these unnatural conditions very well. Those who feared that the modern Englishman would make a poor soldier have had to own that they were entirely wrong. But as long as industrialism continues, we shall be in a state of thinly disguised civil war. There can be no industrial peace while our urban population remains, because the large towns are the creation of the system which their inhabitants now want to destroy. They can and will destroy it, but only by destroying themselves. When the suicidal war is over we shall have a comparatively small population, living mainly in the country and cultivating the fruits of the earth. It will be more like the England of the eighteenth century than the England which we know. There will be no very rich men; and if the birth-rate is regulated there should

be no paupers. It will be a far pleasanter age to live in than the present, and more favourable to the production of great intellectual work, for life will be more leisurely, and social conditions more stable. We may hope that some of our best families will determine to survive, *coûte que coûte*, until these better times arrive. We shall not attempt to prophesy what the political constitution will be. Every existing form of government is bad; and our democracy can hardly survive the two diseases which generally kill democracies—reckless plunder of the national wealth, and the impotence of the central government in face of revolutionary and predatory sectionalism.

Meanwhile, we must understand that although the consideration of mankind in the mass, and the calculation of tendencies based on figures and averages, must lead us to somewhat pessimistic and cynical views of human nature, there is no reason why individuals, unless they wish to make a career out of politics (since it is the sad fate of politicians always to deal with human nature at its worst), should conform themselves to the low standards of the world around them. It is only 'in 'the loomp' that humanity, whether poor or rich, 'is bad.' There are materials, though far less abundant than we could wish, for a spiritual integration of society, which would smooth the transition to a new social order, and open to us unfailing sources of happiness and inspiration, which would not only enable us to tide over the period of dissolution, but might make the whole world our debtor. No nation is better endowed by nature with a faculty for sane idealism than the English. We were never intended to be a nation of shopkeepers, if a shopkeeper is doomed to be merely a shopkeeper, which of course he is not. Our brutal commercialism has been a temporary aberration; the quintessential Englishman is not the hero of Smiles' 'Self-'help'; he is Raleigh, Drake, Shakespeare, Milton, Johnson, or Wordsworth, with a pleasant spice of Dickens. He is, in a word, an idealist who has not quite forgotten that he is descended from an independent race of sea-rovers, accustomed to think and act for themselves. Mr. Havelock Ellis, one of the wisest and most fearless of our prophets to-day, quotes from an anonymous journalist a prediction which may come true: 'London 'may yet be the spiritual capital of the world; while Asia—'rich in all that gold can buy and guns can give, lord of lands

'and bodies, builder of railways and promulgator of police 'regulations, glorious in all material glories—postures, com- 'placent and obtuse, before a Europe content in the possession 'of all that matters.' For, as the Greek poet says, 'the soul's 'wealth is the only real wealth.' The spirit creates values, while the demagogue shrieks to transfer the dead symbols of them. 'All that matters' is what the world can neither give nor take away. The spiritual integration of society which we desire and behold afar off must be illuminated by the dry light of science, and warmed by the rays of idealism, a white light but not cold. And idealism must be compacted as a religion, for it is the function of religion to prevent the fruits of the flowering-times of the spirit from being lost. Science has not yet come to its own in forming the beliefs and practice of mankind, because it has been so much excluded from higher education, and so much repressed by sentimentalism under the wing of religion. The nation that first finds a practical reconciliation between science and idealism is likely to take the front place among the peoples of the world. In England we have to struggle not only against ignorance, but against a deep-rooted intellectual insincerity, which is our worst national fault. The Englishman hates an idea which he has never met before, as he hates the disturber of his privacy in a steamship cabin; and he takes opportunities of making things unpleasant for those who utter indiscreet truths. As Samuel Butler says: 'We hold it useful to have a certain 'number of melancholy examples whose notorious failure shall 'serve as a warning to those who do not cultivate a power of 'immoral self-control which shall prevent them from saying, or 'even thinking, anything that shall not be to their immediate 'and palpable advantage.' To do our countrymen justice, it is often not self-interest, but a tendency to deal with the concrete instance, in disregard of the general law, that blinds them to the larger aspects of great problems. Those who are able to trace causes and effects further than the majority must expect to be unpopular, but they will not mind it, if they can do good by speaking. The logic of events will justify them, and science has a new weapon in official statistics which will register at once the disastrous effects upon wealth and trade which the insane theories of the demagogue will bring about. No agitator can explain away ascertained figures; if we go down hill, we shall

do it with our eyes open. It may be that reactions will be set up which will render the anticipations in this article erroneous. Things never turn out either so well or so badly as they logically ought to do. Prophecy is only an amusement; what does concern us all deeply is that we should see in what direction we are now moving. To do so is to be a really 'practical' man. It may even repay some of us to learn to think—there is so little competition.

W. R. Inge.

THE PROBLEM OF THE AGE

1. **New Fallacies of Midas.** By CYRIL F. ROBINSON. Headley Bros. 1919.
2. **Guilds and the Social Crisis.** By ARTHUR J. PENTY. Allen & Unwin. 1919.
3. **Christianity and Industrial Problems;** Report of the Archbishops' Fifth Committee of Inquiry. 1918.
4. **The Meaning of National Guilds.** By C. E. BECHHOFER and M. B. RECKITT. Palmer & Hayward. 1918.
5. **The Six-Hour Day.** By LORD LEVERHULME. Allen & Unwin. 1918.
6. **Labour and Capital after the War.** Edited by S. J. CHAPMAN. Murray. 1918.
7. **Co-operation and the Future of Industry.** By LEONARD S. WOOLF. Allen & Unwin. 1918.
8. **Three Years of World Revolution.** By PAUL LENSCH. Constable. 1918.
9. **The Birth of Russian Democracy.** By A. J. SACK. New York. 1918.
10. **Die Nächsten Auf-gaben der Sowjet-Macht.** Von N. LENIN. Bern. 1918.

'The condition of society at any given moment must always be considered as modifying itself, because the human species, being composed of organised substances, generating new ideas by the successive modifications of their nature, whilst the artificial rules of life (laws and regulations) do not undergo a corresponding gradual modification of their nature, individual man soon begins to feel new wants; he finds, after a period, that he can no longer move in comfort and liberty under laws and regulations framed long since for substances and circumstances which no longer exist. Hence it is that radical reforms in all things artificial become indispensable after a certain period of time. The most important duty expected by reason, of all rational government, is undoubtedly that of watching the effect of the natural changes thus operated upon whole populations, in order that, after having ascertained the nature of the new ideas which have actually created new imperative wants, the laws and regulations may be so modified *in time* as to maintain political equilibrium. The performance of that important duty requires that rulers should possess three qualities most essential to sound legislation—(1) a knowledge of the age they live in; (2) sagacity to discriminate right from wrong; (3) impartiality to act with justice from a *national* point of view only. . .

'A new system of labour is coming into the world. The new system and the struggles between the classes are positive signs of new social arrangements. Boards of labour or committees of industry

must assume the place now occupied by the great masters. . . . The spirit of the age is an irresistible power. Unions will continue; more strikes and more blunders will succeed each other. However productive they may be of temporary mischief and misery, better associations shall be formed, and from the difficulties of the time the nation will learn. A new world will gradually unfold itself; the financial delusions and blunders which clog and shackle society will become evident to every one; a new kind of knowledge will arise and spread itself. . . .'

IT would be an interesting test of the knowledge of our numerous instructors in labour movements and social evolution to ask them to name the source of the foregoing extract. It reads like a thoughtful and dispassionate comment on 'the present crisis,' a little stilted in style, but so pertinent that it might well be put down to some current periodical or one of the books at the head of this article. As a matter of fact, it is taken from a labour paper of 1834, the official organ of the Syndicalist movement of that period. Most of the books professing to deal with the period are silent about this remarkable movement, which was discovered by Mr. Beer in his investigation of contemporary documents. It escaped the more superficial research of other historians, who lump together as 'Owenite' all the movements initiated in this most creative epoch of social economic thought and action, or accept the contemptuous valuation of Marx and Engels, whose arrogant assertion of their own superiority involved a dishonest depreciation of their forerunners. It was true Syndicalism, that is a genuine trade union movement, springing directly from working men, based on the same principles and pursuing the same ends by the same means as Syndicalism to-day. The central idea was that the wage-earners, or 'wage-slaves,' who produce everything, should by combination and direct action take over the means of production and enjoy the whole fruits of their labour instead of yielding the greater part to the capitalists, who did nothing for it. The means proposed were strikes, frequent and 'lightning' strikes, culminating in the revolutionary general strike, which was first proposed and adopted as a positive policy in 1833. There was to be no violence; the passive 'stay-in' strike of folded arms would suffice. It was thought that financial collapse would follow and wipe out capital, and that in the crash, society and the system of government would break up. The trade unions would then step in and become co-operative societies, carrying

on the several industries for mutual benefit, and would replace Parliament by a general congress, which would regulate production and distribution.

This story of eighty-five years ago has a surprisingly modern ring. Nor was it a mere vision. The plan was crude and never put to the test, because the times were not ripe. The existing unions were quite inadequate, and an effective organisation could not be improvised. But an extraordinary effort was made to create one, and such ardour was thrown into the agitation, and so ready was the response, that it assumed the most formidable proportions with astonishing rapidity. Of all the movements of that remarkable time this was the most significant expression of working-class feeling, for it was quite spontaneous and wholly industrial. The others were initiated and led by intellectual sympathisers. It was the revolt of a class against the conditions of existence in which they found themselves, and it marked the active opening of the long struggle which has continued ever since, with varying degrees of intensity and in different forms. We are witnessing to-day the latest phase of it, which must be viewed in the light of the past if we are to understand aright what we are witnessing.

The current phrase, 'labour unrest,' invented by some journalist as a handy label and commonly used to save the trouble of thinking, implies a conception so inadequate as to be highly fallacious and misleading. It suggests a passing *malaise* which will give place to a normal state of 'labour rest,' when the symptoms have been duly prescribed for. But what we are witnessing is really the unfolding of a great and long-drawn drama which opened nearly a hundred years ago, and is indicated in the passage quoted above. The thoughts expressed in 1834 are so curiously apposite to the present day because the two epochs are parts of one story. The earlier period strongly resembled the present in its main features. It was a time of widespread and active ferment, political and industrial. All Europe was seething with agitations, uprisings, revolts, and revolutions, varying in character and intensity according to local conditions. The turmoil was general, but there was nothing concerted or uniform about it. Western civilisation was in convulsions by a common impulse for change among the nations.

The ground had been prepared by the French Revolution which loosened the springs of thought, and by the Napoleonic

Wars, which put an intolerable strain upon the peoples. They were restive and ripe for change, though they knew not exactly what change they wanted. For the most part it took the political form, for that was the only sort of internal change they knew; the idea of economic, industrial, and social change, apart from forms of government, had not yet arisen. It was born in this epoch and in England and France, because there alone the conditions were ripe for it. And England very soon took the lead. From the first, the movement which developed into socialism on the theoretical side and into trade unionism on the practical side was more solid, real, and lasting than in France, not only because of the more practical English character, but also because the industrial conditions were more advanced. There was political agitation here too, leading up to the Reform Act of 1832; but it was no sooner passed than its failure to 'touch the spot' became manifest. The active and aspiring minds among the wage-earners turned from political to industrial action, and applied the economic teaching of the early English Socialists—Thompson, Hodgskin Ravenstone, and others—not to the establishment of Utopian settlements, but to a radical transformation of the social-economic order. Their aims took shape in the Syndicalist movement described above, which was the first concerted attempt on the part of the working classes to solve for themselves the peculiar problem of our age. The extract given above, which appeared towards the end of the movement, and is remarkable for its philosophic breadth of view, moderate tone, and optimism, states the nature of the problem so well that it is worth reproducing now. For, in spite of all the changes that have intervened, it is essentially the same problem that confronts us to-day, though under different conditions. And the anonymous writer of that day had a larger and truer conception of it than any that can be gained from most of the modern writers, who seem somewhat lost in details, phrases, and formulas.

At bottom, the problem of our age is a particular form of one of the eternal problems which man is impelled by his own nature to be for ever solving afresh. Among the primary and distinctive attributes of man is an insatiable desire to alter his environment and adjust it to his needs. The rudimentary adaptation of external conditions practised by some groups of animals—the builders, burrowers, and hibernators—of which

the beavers furnish the most conspicuous example, is quite different from man's treatment of his environment. Their efforts are finite; they are satisfied with the result and repeat the same procedure interminably with no more change than is imposed by accidental variations of the *milieu*. He, on the contrary, is never satisfied and never still. His is a progressive interference with surrounding conditions, directed by will. He moves on from point to point with a purpose, though not everywhere or always with the same activity. There are stagnant peoples and periods of comparative stagnation in others; but there is no general stopping and no pause. Movement goes on progressively with greater or less activity, and the most energetic people lead.

The environment consists of two great divisions, which present totally different problems. One is the external world of nature, animate and inanimate; the other is man's fellow-men. His way with the first is to master and tame and yoke in his service or, when he cannot do that, to remove from his path. His earliest achievement was probably the mastery of other animals, because it is the simplest. He brought into his service for food and work and various useful things those that can yield them; he destroyed others. Superior intelligence and force were the means, but chiefly the former. The conquest and adaptation of the vegetable world to his needs required a far higher degree of intelligence, and must have come later, though in pre-historic ages. The cultivation of the edible grains and fruits from the wild is usually passed over or taken for granted in sketches of man's past, but whenever it took place it was an achievement of the highest kind, and one demanding an order of intelligence quite equal to that of our own time. Could we repeat it now? Could we produce edible wheat from the wild? Those remote civilisations of the past, of which we know nothing, were more advanced in the mastery of Nature than we are apt to suppose. They did great things even in the conquest of inanimate matter, which is the last step and the greatest, because in it man gets no help from other forms of life, and is thrown entirely on his own resources. This is the special pride of our own age and the result of knowledge handed down and accumulated; but the men who found out the wheel and the lever, the basis of all machinery, and discovered the properties of fire, were no ignorant savages.

So man, driven by the internal impulse of his own nature,

has gone on step by step, from age to age, mastering his environment, moulding and adapting it to his use. As Lucretius says :—

> 'Usus et impigræ simul experientia mentis
> Paulatim docuint pedetentim progredientis.'

When Benjamin Franklin defined man as a 'tool-using 'animal,' he hit upon a particular but not specially significant illustration of a general truth. The *impigra mens*, which is the real agent and a distinctive possession, has brought him many things besides tools, and some of them more powerful, fashioned from his environment and applied to its further conquest. The process is endless, and seems to stretch to infinity. Always new problems present themselves, and the active mind is unceasingly busy upon them ; but they are parts of one process, new links in the same chain.

The problem presented by the other half of man's environment—his fellow-men—is far more difficult ; for here his nature is at variance with itself, and the resulting conflict gives far more trouble than all the struggles with the external world. Man's nature is double ; it is both individual and social, and the peculiarity of this duplex character is that the two qualities are so strongly marked and evenly balanced that neither will wholly yield to the other. In the other animals either the individual or the social predominates ; among the solitary animals the former, among the gregarious ones the latter. In man there is no such definite and standing relation. Sometimes one and sometimes the other predominates, but there is always a struggle between them, latent at times, yet never abolished nor very long in abeyance. It tears man to pieces. He is like the 'amphibilious' animal of the showman which 'can't live on the 'land and dies in the water.' He can't live by himself, and he won't live in company without quarrelling so often and so violently that an elaborate and costly system of government and laws has to be maintained to prevent even small societies from being broken up by internal strife. Men must live together ; their social nature and their needs impose it. They are able to master the external environment only in association ; but the individual element incessantly asserts itself and breaks through the bond of union. Common needs unite them ; individual claims sunder them. And yet the two principles are inextricably mingled and interdependent. The individual can

develop only in a social environment; the society can advance only through the free play of the individual.

The eternal problem, constantly posed anew, is to reconcile the two and keep the balance between them. This is, at bottom, the problem that all the theorists and reformers, political and social, are perpetually trying to solve. There are some who would solve it very simply by the complete subordination of either principle to the other. They represent the extreme wings. On the one side are those who would make the individual principle supreme. Free mankind, they cry, from the shackles of authority, and all will be well; men will spontaneously do the right thing. This is anarchism. It rests on the old fallacy of the 'natural man,' who is assumed to be perfectly good if let alone. The argument involves its own refutation. 'Let alone' by whom? Only by man. There has never been anyone else to interfere. All the shackles of authority or the 'social system' have been created by man himself. The assumption implied by the argument is that 'the system' somehow created itself and then enslaved man, which is nonsense. Man created the system to suit himself; there was no one else to create it or even consult about it. If it is bad, the fault is man's only. But why did he create it at all? Because men cannot be trusted to treat each other fairly. If they could, there would be no need of any government or laws at all. There is no need of any between friends, who do treat each other so. The system of order under authority was set up to protect men from each other, and the obvious purpose was primarily to protect those who most need protection. Rousseau's argument that the few, who were stronger or cleverer than the many, somehow or other persuaded the latter to set up a system for the protection of the strong and clever—who needed none—and for putting themselves in the power of those in whose power they already were by virtue of their weakness—that argument is too ridiculous for serious consideration. But if it were valid, it would prove once more that the stronger cannot be trusted to treat the weaker fairly. It follows that if all restraint were removed men would not do the right thing, but those who could would promptly take advantage of their freedom to oppress their fellows; which is, in fact, just what happens when the chance occurs.

If extreme individualism trusts human nature too much, the

opposite extreme trusts it too little. Pure collectivism would suppress all individuality; it would guide and control every one from the cradle to the grave under rules and regulations imposed by authority and compulsorily enforced. Such freedom as was allowed would be so hedged round by restrictions as to stifle originality. Tranquillity might be secured, but it would be the tranquillity of the submissive herd. If the supremacy of the individual principle means anarchy, the supremacy of the social means stagnation. Both states are so obnoxious to human nature that no one advocates either. But many on both sides unreservedly champion the one or the other principle as their temperament prompts, adopt it as an ideal, and implicitly assume, if they do not positively assert, that the further it is carried the better. Neither school ever wholly gets its way; they succeed only in tipping the balance to one side or the other until it reaches a point at which the consequences provoke reaction. The combatants themselves prove the strength of the element they are attacking. While the champions of Individualism aim at promoting a higher form of social life, the Collectivists reveal the individual in themselves by their intolerance of opposition. They burn to force their own ideas on the rest of mankind; they habitually impute the basest motives to all who disagree with them; scorn and abuse are their favourite weapons. They reveal the old Adam in themselves while demanding his suppression in others. There are no more thorough egotists, and we see in Russia how far their intolerance may carry them. The Germans thought to force their Kultur on the world at the point of the bayonet; the Bolsheviks use the same weapon to establish theirs in the name of Marxian Communism.

The only complete solution is reconciliation through the Gospel rule, which recognises both principles, but replaces strife by love, forcible suppression by spontaneous concord, and so makes each serve the other. But it has never been applied, save occasionally in very small communities and for a limited time. Human nature has proved too strong for it. The actual solution has always been a compromise, which has taken different external forms at different times and under different conditions, but has had for its underlying motive the adjustment of the rival claims of these two primary needs of human nature. Strife, whether of persons or classes or nations, implies an assertion of the individual element; law represents the social principle. Its

function is to keep society together by restraining the individual element, which would otherwise tear society to pieces. Forms of government and codes of law embody the compromise reached under a given set of conditions. A compromise may also be effected by arrangement without law. This often happens in private life; and nations have hitherto had no other means of effecting a compromise between their individual claims and their social needs. The League of Nations is an attempt to set up a legal procedure for accomplishing the same purpose.

All such compromises, whether represented by forms of government and laws or not, need revision from time to time. They are tolerable when concluded; that is evident, because they are tolerated. But they are always more or less imperfect; they do not strike a true balance. They keep society together for the time being, but they generally do so by unduly repressing some individual element, possibly in favour of another; and after a time the repressed element finds the yoke too irksome and begins to reassert itself. Often the compromise, though not originally intended to have that effect, is so twisted by the interplay of social forces, or by interpretations of the law, or by misuse of authority, that it weighs too heavily on some individual element, which eventually rises in revolt and threatens the disruption of society. If it is resisted and strong, a revolution occurs on a large or a small scale, and a new compromise is made.

In any case revision of a compromise is necessary after an interval of time, because conditions change. Man's ceaseless efforts to alter his external environment react on the problem of men's relations to each other. Population increases, knowledge advances, new ideas arise, material conditions change, and standards and values change with them, involving a readjustment of relations. So the problem is presented anew; every age has its own. As our Syndicalist of 1834 put it, individual man begins to feel new wants, and regulations framed to suit earlier conditions become intolerable; the old social order must be modified to meet the new requirements, a new compromise must be made.

It has been said above that the problem of our own time is essentially the same as that which confronted society in this country early in the last century and provoked the reflections quoted. It is the same, that is to say, in its main character,

though not in details. What is that character? The prevailing tendency is to regard it as predominantly, if not wholly, economic. There is some ground for this opinion. The great change which occurred in social conditions about a century ago and disturbed old relations was the vast expansion of industry by mechanical invention and applied science. The result was an unprecedented increase of wealth, accompanied by an unprecedented growth of population. This development carried with it some undesirable results. It did not create the difference between rich and poor, which has existed throughout history, but it made the contrast more visible by greatly extending its area, and more striking because the new rich and the new poor came from the same social class. On the one side was a rapid accumulation of wealth by the few, on the other a great aggregation of poverty massed together in new towns, which sprang up and grew with a rapidity previously unknown. The new wealth was visibly ill distributed, and to the question of production, which had previously occupied men's minds, that of distribution was added, and presently became the more important of the two. The prominence of these questions naturally created a tendency to regard the social disorders of the time in an exclusively economic light, and this tendency was greatly strengthened, especially among Socialists who were foremost in calling for a new order, by the theory of Marx, which made the economic factor the supreme and determining influence in history. Economic conceptions filled the air, and economic phrases dropped from every pen. People could see nothing but an economic problem in the industrial order, whatever view they might take of it; and though another element has lately come to be recognised, the formulas most frequently in use are still economic. For instance, 'production for use, not profit,' 'the capitalist system,' 'the relations of labour and capital,' 'the co-operative commonwealth,' and so on are purely economic.

Now it is an extremely interesting and significant fact that workmen themselves have always recognised another and a non-economic factor. The Syndicalist argument of 1834 uses the words 'comfort and liberty' in explaining the demand of individual man for a new order; and it is no mere coincidence that the motto of the chief Syndicalist organisation of to-day, the French *Confédération Générale du Travail*, consists of those identical words. Writers on Syndicalism do not mention the

motto, because they have studied the subject only from books, not from life, and are either unaware of the fact or blind to its import; but it is really illuminating. The phrase is common to both periods, because it springs direct from the wage-earners and expresses their feelings, not what some theorist supposes them to feel. Of the double demand, comfort covers material conditions and stands for the economic side; it depends on the production and distribution of wealth. Liberty is a totally different and a higher matter; it touches a man's personality and has nothing to do with wealth. A slave may live in perfect comfort; a tramp may enjoy more complete liberty than almost any other man, and that is, in fact, the great attraction which the life undoubtedly possesses. The two things must be clearly distinguished if the problem is to be understood, for they involve two different relationships, which are apt to be confused. The economic relation is that which is usually described in the phrase 'Capital and Labour.' It may have been a valid expression once, when both words were used in an abstract sense and meant the two factors necessary for production—namely, the material means and their manipulation. But now that 'Labour' is thought of as workmen or wage-earners, while 'Capital' remains impersonal, the antithesis has become false and a source of fallacy. The real antithesis is between owners and operatives, or payers and paid, or profits and wages, and it connotes a purely economic relation.

The other relation, which involves the questions of liberty and personality, is that between employer and employed, or director and directed, or those who give and those who take orders. This relation is purely human, and can be brought under no economic formula. It exists under every system of industry and in every form of concerted activity without any reference to 'capitalism,' because no industry or other activity carried on by concerted effort can be successfully conducted without the exercise of some authority; and the more complex the organisation and the larger the scale the more complete must be the system of authority. It is more rigid in services conducted by the State or other public bodies than in private ones; and Lenin, who has abolished the 'capitalist system,' and established the 'proletarian commune,' has discovered that it is rather more necessary under that ideal system than before. For the successful conduct of industry, he told the Soviets at

Moscow, 'unquestioning submission to the single will of the 'director of the works' is an absolutely indispensable condition.

The standing confusion between the two relations, which has so long obscured the personal element by merging it in the economic, is due to the fact that when men began to reason about these things the employer was generally a capitalist and the owner of the works he conducted. They assumed a necessary connection and mixed up the two functions; but there is no necessary connection at all. The employer and conductor of the enterprise may operate entirely with borrowed capital, and in certain classes of business that is the usual way of beginning. It does not affect his conduct of the business or his personal relations with the employed in the slightest degree; and the capitalist from whom he borrows has nothing to do with either. When a corporation or other public body acquires or creates an enterprise such as a harbour, a market, docks, tramways, gas-works, water-works, and so forth, it raises a loan for the purpose and the investors are the capitalists, but they have nothing to do with the conduct of the enterprise or the persons employed in it. Similarly, when a contractor undertakes some building or construction work he is the employer of the men engaged, but he does not find the money; the capitalist and owner is the man or body for whom it is built. The same relation exists in the system of contract within works by which certain workmen undertake a particular job for a lump sum and pay the men engaged on it, who are employed and controlled by them. This system prevails extensively in a number of industries and takes different forms. In cotton-spinning it is the standing and uniform practice; the spinner employs and pays his piecers. But he is not the owner or the capitalist. In their book on 'National Guilds,' Messrs. Bechhofer and Reckitt quote and approve a suggestion made in the *Guildsman* that this system should be extended to the trade unions, which would take up such contracts through shop-committees, and even undertake the entire production of the works. They urge that this would 'weaken the autocracy of the capitalist by with-'drawing functions from him which had been previously bound 'up with his ownership of the means of production.' That is an admission that there is no necessary connection between the functions of capitalist and employer, though they apparently do not perceive all that is involved in the distinction, and are

evidently unaware that M. Yves Guyot put forward the same proposal sixteen years ago as a preventive of industrial conflict.*

It is the merit of the Guild Socialists, who are the youngest and far the ablest school of theoretical reformers, that they recognise the element of liberty in the social problem, and lay more stress upon it than on economic inequality, which was the parent of socialism, and has always been the mainstay of its propaganda, both sentimental and 'scientific.' The inevitable collapse of Capitalism is to come about, according to the Marxian theory, through the ever-widening gulf and class war between the exploiters and exploited, or 'bourgeoisie' and 'proletariat,' or 'Haves and Have nots' (Erfurt programme). The Guild Socialists take a wider view. They find the root of the evil 'not in any imagined problem of poverty nor in any 'inevitable stage of economic development, but in a vile concep-'tion of human relationship. . . .' They rail against the Fabian ideal of comfort and security, and insist on freedom. This is an advance on the narrow conception of the problem held by the benevolent, the economists and the Socialists; but they get back themselves into the economic groove by attributing unfreedom entirely to the 'wage-system,' and finding the remedy in its abolition. Similarly, Mr. Tawney, who carefully separates poverty from the question of liberty, views the latter as an economic question. Guild Socialists are so obsessed by the wage-system as the arch-enemy that they even attribute a malign influence to the word 'wages,' and want it changed to 'pay.' This demand reveals ignorance of the actual conditions. The word 'pay' is more in use in industry than 'wages,' which is an academic term popularised by economists, statisticians and official publications. 'Pay-day' and 'pay-sheet' testify to the real usage. No one who knew his way about would ask a workman what his wages are. The workmen call it pay, or money, or brass, or some vernacular equivalent; a more formal term is 'earnings.' The one occupation in which 'wages' is uniformly used is domestic service, which is not capitalist or carried on for profit. There is nothing in this verbal fuss,

* *Les Conflits du Travail et leur Solution.* The original idea was put forward by de Molinari in 1842, which takes us back nearly to the first Syndicalist effort.

and the real question concerns neither wages nor pay, but personality.

The personal factor has lately come to be pretty widely recognised in different quarters, though not clearly understood. The Archbishops' Report has some paragraphs dealing with it, but here again it is represented as depending on economic relations, and exception is taken to the word 'hands' as signifying a degraded *status* assigned to workmen by the present economic order. This is another imaginary offence which vexes the souls of many writers and is constantly reappearing. 'Hands' is simply a convenient general term, borrowed from the Navy. It has no economic or degrading significance at all. Messrs. Bechhofer and Reckitt argue that a soldier is not 'taken 'on' as a 'hand' as evidence of his more honourable status. They forget, or do not know, that a sailor, who is quite as highly esteemed, is treated in this dreadful manner, which implies nothing derogatory, as we may learn from Dibdin's use of the word :—

> 'Yet shall poor Tom find pleasant weather,
> When He who all commands
> Shall give, to call life's crew together,
> The word to pipe all hands.'

The archbishops can hardly see anything degrading in that, whatever their committee may say; and anyone who has heard Sims Reeves sing the lines knows with what solemnity the words 'all hands' can be invested. Would 'souls' be any better? The question recalls the description of an American church which had 'fixin's for 3000 souls upstairs.' After all, 'work 'for 3000 hands' sounds less patronising and derogatory. The sinister meaning read into harmless terms is wholly fanciful, and would not be worth mentioning if it were not so widely used as a serious argument. The truth it is intended to establish needs no such far-fetched support.

The demand of workmen for a voice in the management, which has taken concrete shape in the shop-stewards' movement, is a direct assertion of the personal element, and gives a much clearer indication of its real nature than the rather confused notions of sympathetic outsiders, because the workshop is the actual scene of personal relations, and a spontaneous demand emanating from it shows where the shoe pinches. The demand is not new, though, like many other things, it has undergone a

forcing process through the war, and has developed a particular form. It was a distinctive feature of the 'new unionism' of thirty years ago, and insistence on it in the engineering industries led eventually to the great battle of 1897. But, in truth, the driving power of the whole trade union movement from the early part of last century was derived from the same source. It had a deeper spring than the mere need for collective bargaining about rates of pay. Workmen felt themselves individually helpless in the grip of authority, and they were moved to combine in order to assert their equal manhood and resist tyrannical treatment. Of course the economic factor was prominent and important in their relations with the employer; it always has been and still is. But what they resented most—and still resent—was a bullying, overbearing demeanour which ground them down and denied them the treatment of free men. Where they were treated with fair personal consideration trade unionism made no headway, though the economic conditions might be the same as in establishments where it was strongest.

The influence of the personal factor may be observed at any time. Just as one officer is adored and another loathed by the men in the same regiment, so it is in industrial life. Men in the same employ will do anything for one official and be always in revolt against another, who 'puts their backs up' every time he speaks to them. The advent of a new foreman may turn a peaceful workshop into a centre of mutiny. Why is it that the staffs of industrial concerns do not combine against the employer, but are nearly always on his side in a conflict with the workmen? It is not because they are highly paid or do less work, for they are often poorly paid and work much harder than most of the men. We have recently heard much about the perils of the miner's life, but the men who encounter the greatest dangers, from which the miners are excluded, are the engineers and managers. The main reason why office and technical staffs generally adopt a different attitude from discontented workmen towards an employer is that his attitude to them is generally different. They are treated with more personal consideration; their self-respect is not wounded, and they feel freer. They have their own grievances but are not moved to revolt. Exceptionally skilled workmen are in a similar position. They know they can always get a good job and feel independent, and the employer

takes care to treat them accordingly, because he does not want to lose them. In a pottery works, for instance, the potter is a sort of king; a good one cannot be replaced, he has a gift. The consequence is that he feels independent, he works when he likes and stops when he likes, and he is treated with respect. Workmen in any position of responsibility, such as the charge of a steel furnace or a hydraulic press, are generally contented, not because they earn more money than the rest, but because responsibility implies recognition of worth and fosters self-respect.

Enough has perhaps been said to make clear the distinction between the purely economic and the psychological factor in the problem. The conspicuous emergence of the latter in the present day is one of the most striking effects of the changes that have taken place since the first Syndicalist movement, and that differentiate the present from the past. The classes under authority in the social order have become conscious of a new status, or rather of legitimate claims to a new status, and it is their assertion of those claims that is forcing on the social organism a new readjustment of individual relations within it. This revolt is not confined to industry or to the sphere of Capitalism; it has extended to State employment, such as the post office, and to the police and prison warders, who stand quite outside capitalist economy, and receive pay or salaries for public services, not wages for hired labour.

That fact alone proves the inadequacy of the Socialist analysis and of Socialist remedies. The aspirations embodied in these claims have been ripened by the war, which has quickened the consciousness of merit in the classes concerned; but they have been long maturing under standing influences. The most important is the diffusion of knowledge and intelligence by educational agencies, which include a great deal besides schooling. There are public libraries and reading-rooms, cheap books, newspapers and other periodicals, lectures and classes of all kinds, museums and galleries, clubs and debating societies. Facilities for locomotion and travel are another great agency; all classes can get about and see the world. The diffusion of real wealth by cheap production has wrought a great change in personal attire and household appointments; and the improvement of housing has raised the standard of comfort. The diffusion of political power by the development

of democratic institutions, and the vast increase of industrial power by the growth of trade unionism, have created the consciousness of ability to secure a recognised status corresponding to the mental and material advances enumerated, and have stimulated the determination to secure it. The war, which summoned all classes to throw themselves into a common effort, has brought to a head the movement towards greater social equality which had long been maturing under these influences.

To take a narrower view is to misread the signs of the times and make a psychological error. If society is to hold together, it must be readjusted to a new balance of individual and particular interests; there must be a new synthesis or compromise, and that will not be successfully done unless the problem is understood. It is necessary, as the writer of 1834 put it, to 'ascertain the nature of the new ideas that 'have actually created new imperative wants,' in order that the social edifice be 'so modified *in time* as to maintain political 'equilibrium.' The alternative is an explosive change or revolution, of which we have plenty of illustrations before us.

This article is an attempt to analyse the problem, and it has been shown that the individual needs which have asserted themselves against the existing social order fall into two categories—one material and strictly economic, the other psychological and extending beyond economic conditions, though most prominent in industrial life. They are summed up in the words comfort and liberty. The first connotes a larger share of the aggregate wealth of the community, the second a less subordinate place in it and a higher personal status. Of the two, the latter is the more important, as the evidence given to the Coal Commission by Mr. Straker for the Miners' Federation clearly indicates, and as Mr. C. V. Corless recently pointed out in an address to the American Institute of Mining Engineers. It is the more important now, because the material grievance, once supreme, has been greatly mitigated by economic and social developments during many decades, while the personal grievance has been rather aggravated by them, and has been brought into sharper relief by the material improvement. How are these demands to be met?

It is obviously impossible, at the close of an article like this, to examine the innumerable schemes and projects daily pressed

upon public attention; but some reference to them must be made in the light of the foregoing analysis of the problem.

The Marxian class war, carried out in Russia and attempted in Germany, to establish the 'dictatorship of the proletariat,' has few advocates, and may be ruled out. It is no solution, but failure to find one. It serves neither comfort nor liberty. War of any kind is anti-social, a conflict between individual wills, in which the socia element disappears; but the problem is to preserve it and reconcile it with the individual. The Bolsheviks have apparently discovered this. After suppressing the *bourgeoisie* by force they found they could not get on without them, and have lately been trying to secure their co-operation. They should have done that at first, without war; but then they would not have been Bolsheviks.

'Nationalisation' or State ownership and control is more practical. It exists, and is capable of extension; it will, no doubt, be extended. But its applicability is limited. It is suitable to mature industries of a monopoly character, in which there is no great need of initiative and enterprise. It serves the interest of consumers, and is consequently advocated by those who regard that as the paramount object, but it subordinates unduly the interest of producers. It may promote comfort, but is inimical to liberty. If applied universally it would destroy all liberty. In the official hierarchy authority is more rigid and regulations more minute than in private establishments; and there would be no escape. Moreover, the war has brought out a particular objection to the State conduct of industry not previously perceived. It has frequently been argued by Socialists that the 'capitalist system' broke down in the war and had to be replaced by the State. That is to say, modern war cannot be carried on under the former but can be under the latter. It follows that the former is less likely to lead to war than the latter, and will rather act as a safeguard against it. Nor is this merely a debating point. Commercial competition is said in the same quarters to be the chief cause of war; but if the State itself were the competitor, as it would be compelled to be by the demands of national economy, the danger would be greatly increased. The trader in remote places would be a Government official, not a private person. German Socialists have, in fact, argued in excuse for Germany that it was the special development of State capitalism there which forced her into an aggressive war.

Passing on to the ideal systems that exist as yet only on paper, it is to be noted that the incompatibility of Collectivism with liberty gave rise to modern Syndicalism—another proof of the predominance of the demand for liberty. Pure Syndicalism, which means the ownership and control of industries by the trade unions, has not been tried in recent years, and is not likely to be, for the unions know now that they cannot run an industry, and have carefully passed by the opportunities of trying their hand afforded by the war. The theoretical objection to it is that it would be too individual and not sufficiently social; the industries would be run for the benefit of the union without regard for other interests. Both these objections are met by Guild Socialism, which would replace the trade union by a guild embracing all grades of workers and would vest ownership in the State. It is a brilliant idea, and is rapidly ousting the older schemes in popular favour. It corrects the defects of State control and of trade union ownership. Many industries could be carried on by a guild comprising all the technical and managing staffs, and the State as the owner would represent the interests of consumers; the individual and the social would be combined. Theoretically the plan is feasible on a considerable scale, though not in the form of a universal system as projected by the complete scheme of National Guilds, which is quite impracticable for many reasons. The great object of guildsmen is to get rid of the wage system or 'wage slavery'; but they have formulated no alternative mode of remuneration, which would ensure better terms for the lower grades, and the Guild might be a greater tyrant than the private employer. However, no Guild has yet been formed. Even the trade unions are not ripe for it in any industry, and there is not a sign that the intellectual grades would be willing to join. The whole thing is still in the air. As for the medieval form of guilds, all Mr. Penty's brilliant and persuasive advocacy fails to bring them within the bounds of possibility. He forgets that medieval methods are suited to a medieval population. By far the greatest result of modern industry is the vastly increased population it has enabled to subsist, a fact very clearly brought out by Dr. Lensch in regard to the development of Germany since 1890.

The expansion of the co-operative societies to cover all industries is another proposed solution very ably set out by

Mr. Woolf. But in spite of the success of the societies it is an untenable proposition. The truth is that there is something in all these theoretical systems, but none of them is capable of filling the rôle assigned to them by their advocates, as Mr. Cyril Robinson's acute and dispassionate survey very clearly shows. There is a place for them, but a limited one. The vision of a single, complete, and uniform system is itself an illusion. It arises from the deep-seated but vain yearning in human nature for uniformity and simplicity, which has led the philosophers to seek for a master formula, a key to unlock all doors. There is no such key, for the evolution of life is all in the direction of multiplicity, diversity, and complexity. That is conspicuously true of industrial life. No single system can be applied, for the conditions are infinitely varied.

That holds good also of the numerous proposals for co-partnership, profit-sharing, and so on within the existing system. There is a place for them, but no one is applicable to all conditions. Lord Leverhulme's experience shows how difficult it is to fit the principle satisfactorily to a particular industry; and his own method would not fit other conditions. But the principle will endure; it is one way of reconciling the social and the individual factors, and its particular merit is that it preserves the latter, which many systems would sacrifice. The mistake that the theorists make is to take account only of what they see and to leave out the future. Full grown and mature industries may be carried on under some social or co-operative management; but the young, the nascent and, still more, the unborn industries need the creative idea which exists only in the individual brain and can be realised only by its free activity. When workmen demand more liberty and a share in the management they do not mean to oust or override superior ability, knowledge and experience in the general conduct of the concern. What they want is to be treated as intelligent participators in it, to be consulted and have things explained to them. It is a reasonable and laudable claim, and employers will have to concede it. If they were wise they would welcome it and those who are do so. The trade unions have at present great power without any responsibility, always a dangerous position. The remedy is not to fight them, but to confer responsibility by taking them into consultation.

Industry to-day has entered on a stormy and dangerous sea.

The reframing of the social order, and the readjustment of relations within it will prove a severe test; but it has to be gone through, and if the nature of the problem is fully understood our people have sense enough to go through it successfully. A blind struggle would be failure and ruin. The recent agreements made without conflict in large groups of industry are a good beginning; but there is much more to be done, for which a larger vision and clearer thinking are both needed.

A. SHADWELL.

THE WRITINGS OF M. CLEMENCEAU.

1. **De la Génération des Éléments anatomiques.** Par le Dr. GEORGES CLEMENCEAU. Paris: Baillière et fils. 1865.
2. **J. Stuart Mill: Auguste Comte et le Positivisme.** Traduction par le Dr. G. CLEMENCEAU. Paris: Baillière. 1868.
3. **La Mêlée Sociale.** Par G. CLEMENCEAU. Paris: Charpentier. 1895.
4. **Le Grand Pan.** Par G. CLEMENCEAU. Paris: Charpentier. 1896.
5. **Les plus Forts, roman contemporain.** Par G. CLEMENCEAU. Paris: Charpentier. 1898.
6. **Au Pied du Mont Sinaï.** Par G. CLEMENCEAU. Paris: Floury. 1898.
7. **Au Fil des Jours.** Par G. CLEMENCEAU. Paris: Fasquelle. 1900.
8. **La Voile du Bonheur; pièce en un acte.** Par G. CLEMENCEAU. Paris: Fasquelle. 1901.
9. **Aux Embuscades de la Vie.** Par G. CLEMENCEAU. Paris: Fasquelle. 1903.

IN the year 1893, after a succession of events which are still remembered with emotion, M. Clemenceau fell from political eminence, not gradually or by transitions of decay, but with theatrical suddenness like that of a Lucifer 'hurled headlong ' flaming from the ætherial sky.' His enemies, rewarded beyond their extreme hopes, gazed down into the abyss and thought that they discerned his 'cadavre politique' lying motionless at the bottom. They rejoiced to believe that he would trouble them no more. He had passed the age of fifty years, and all his hopes were broken, all his ambitions shattered. They rubbed their hands together, and smiled; 'we shall hear no more of *him*!' But they did not know with what manner of man they were dealing. What though the field was lost? All was not lost:

> 'The unconquerable Will,
> And study of revenge, immortal hate,
> And courage never to submit or yield;
> And what is else not to be overcome?'

So brilliant an array of mingled intelligence, pertinacity, vigour, and high spirits have rarely been seen united, and the possessor of these qualities was not likely to be silenced by the most formidable junta of intriguers. As a matter of fact,

he turned instantly to a new sphere of action, and became the man of letters of whom we propose to speak in these pages. But for his catastrophe in 1893, it is probable that M. Clemenceau would never have become an author.

A brief summary of his early life is needed to bring the series of his published works into due relief. Georges Clemenceau was the second son of a family of six; he was born on the 28th of September 1841, and was therefore a little younger than Joseph Chamberlain and Lord Morley, and a little older than Sir Charles Dilke. His birthplace was a hamlet close to the old and picturesque town of Fontenay-le-Comte, in the Vendée, where his father practised as a doctor. There can be no doubt that Benjamin Clemenceau, an old provincial 'bleu,' materialist and Jacobin, exercised a great influence on the mind of his son, who accepted, with a docility remarkable in so firm an individual, the traditions of his race and family. We are told that the elder Clemenceau 'communicated to his son his hatred of injustice, his independ-'ence, his scientific worship of facts, his refusal to bow to anything 'less than the verdict of experiment.' There was also a professional tradition to which young Georges Clemenceau assented. For three hundred years, without a break, his forebears had been doctors. I do not think that any of his biographers has observed the fact that Fontenay-le-Comte, though so small a place, has always been a centre of advanced scientific thought. It has produced a line of eminent physicians, for Pierre Brissot was born there in the fifteenth century, Sébastian Collin in the sixteenth, and Mathurin Brisson in the eighteenth. There can be little doubt that these facts were in the memory of the elder Clemenceau and were transmitted to his son.

Fontenay-le-Comte is on the western edge of the Bocage of Poitou, not to be confounded with the delicious woodland Bocage which lies south and west of Caen. The Poitou Bocage is a more limited and a more remote district, little visited by tourists, a rolling country of heather-land clustered with trees, and split up by little torrential chasms. It is often to be recognised in M. Clemenceau's sketches of landscape, and is manifestly the scene of part of his novel, 'Les Plus Forts.' The natural capital of this Bocage is Nantes, lying full to the north of Fontenay, and thither the young man went at an early age to study at the Lycée. It was at the hospital at

Nantes that his first introduction to medicine was made. Thence he finally departed in 1860, another *déraciné*, to fight for his fortunes in Paris. He brought little with him save a letter of introduction from his father to Étienne Arago. For five years he worked indomitably at his medical studies, refreshing his brain occasionally by brief holidays spent at his father's rough and ancient manor-house of Aubraie, in his native Bocage.

He took his degree of M.D. in 1865, and presented a thesis 'De la Génération des Éléments anatomiques,' which was immediately published, and which caused some stir in professional circles. It is said to contain a vigorous refutation of some of the doctrines of Auguste Comte, and in particular to deprecate a growing agnosticism among men of science. The axiom, 'Supprimer les questions, n'est pas y répondre,' is quoted from it, and again the characteristic statement, 'Nous ne sommes pas 'de ceux qui admettent avec l'école positiviste que la science ne 'peut fournir aucun renseignement sur l'énigme des choses.' The thesis dealt, moreover, according to M. Pierre Quillard, who has had the courage to unearth and to analyse it, with 'les organismes rudimentaires des néphélés, des hirudinées et 'glossiphonies,' subjects the very names of which are horrifying to the indolent lay reader. The young savant, shaking off the burden of his studies, escaped to London, where he appears to have made the acquaintance, through Admiral Maxse, of several Englishmen who were about to become famous in the world of politics and letters. But perhaps these friendships are of later date; as the memoirs of the mid-Victorians come more and more to light, the name of M. Clemenceau will be looked for in the record.

He went to the United States in 1866, and took an engagement as French master in a girl's school at Stamford, in Connecticut, a seaside haunt of tired New Yorkers in summer. A little later, Verlaine was under-master in a boys' school at Bournemouth. How little we guess, when we take our walks abroad, that genius, and foreign genius too, may be lurking in the educational profession! M. Clemenceau appears to look back on Stamford with complacency; he accompanied 'dans leurs 'promenades les jeunes misses américaines: c'étaient de libres 'et délicieuses chevauchées, des excursions charmantes au long 'des routes ombreuses qui sillonnent les riants parages' of Long Island Sound. He declares that the happy and light-hearted

years at Stamford were those in which his temperament 'acheva 'de se fortifier et de s'affiner.' It was in the course of one of the 'suaves équipées' that he ventured to propose to one of the young American 'misses.' This was Miss Mary Plummer, whom he married after a preliminary visit to France.

For the next quarter of a century Clemenceau was exclusively occupied with politics. In 1870 he was settled in Montmartre, in a circle of workmen and little employés whose bodily maladies he relieved, and whose souls he inflamed with his ardent dreams of a humanitarian paradise when once the hated Empire should fall. Suddenly the war broke out, and the Empire was shattered. The government of defence nominated Dr. Clemenceau Mayor of Montmartre, the most violent centre of revolutionary emotion, where the excesses of the Commune presently began. He represented Montmartre at Bordeaux in 1871, and in 1876 Montmartre, which had remained faithful to its doctor-mayor, sent him again to the Chamber of Deputies as its representative. This is not the occasion on which to enter into any detail with regard to the ceaseless activity which he displayed in a purely political capacity between 1870 and 1893. It is enshrined in the history of the Republic, and will occupy the pens of innumerable commentators of French affairs. We can only record that in 1889, M. Clemenceau, who had refused many pressing invitations to leave Paris for Draguignan, consented to take up his election as deputy for the Provençal department.

The career of M. Clemenceau as deputy for the Var came to an end in 1893, after the explosion of the Panama scandal. On the 8th of August in that year he pronounced an apologia over his political life, an address full of dignity and fire, in which the failure of his ambition was acknowledged. His figure was never more attractive than it was at that distressing moment, when he found himself the object of almost universal public disfavour. He had, perhaps, over-estimated the vigour of his own prestige; he had browbeaten the political leaders of the day, he had stormed like a bull the china-shops of the little political hucksters, he had contemptuously exposed the intrigues of the baser sort of political politician. He disdained popularity so proudly, that one of his own supporters urged him to cultivate the hatred of the crowd with a little less coquettishness. But he was a political Don Quixote, not to be held nor bound; he could but rush straight upon his own temporary discomfiture.

The means which his enemies employed to displace him were contemptible in the extreme, but their malice was easily accounted for. He had excited the deep resentment of all the supporters of General Boulanger, who accused him of being the cause of their favourite's fall, and with having betrayed him in 1888. The fanatics of the Panama scandal endeavoured to prove that his newspaper, *La Justice*, had supported the schemes and accepted the cheques of the egregious Cornelius Herz. The Anglophobes, who unhappily numbered too many of the less thinking population of France at that time, accused him of intriguing with the English Government to the detriment of the Republic, and they went so far as to produce documents, forged by the notorious mulatto, Norton, which they pretended had been stolen from our embassy in Paris. 'Qu'il parle anglais,' was one accusation shouted at Clemenceau in the Chamber on the 4th of June 1888. Calamities of every sort, public and private, gathered round his undaunted head. At last he could ignore these attacks no longer, and on a fateful day he rose to put himself right before Parliament. It was too late; his appearance was greeted by an icy silence, and, as he said himself, he glanced round to see none but the hungry faces of men longing for the moment when they could trample on his corpse. Magnificent as was his defence, it availed him nothing against such a combination of malignities; even his few friends, losing courage, failed to support him. The legislative elections were at hand, and the enemies of M. Clemenceau very cleverly organised a press propaganda, which presented him to the French public in an absolutely odious light. He went down to address his Provençal constituents, and in the little mountain town of Salernes he delivered the remarkable speech to which reference has been made. All in vain: on the 20th of August 1893 he was ignominiously rejected by the electors of the Var in favour of a local nonentity, and his career as a member of parliament ended.*

* A very interesting account of the events which led to the fall of M. Clemenceau is given in Mr. Hyndman's biography (Grant Richards), published since the present article was written. Mr. Hyndman, who had the advantage of enjoying M. Clemenceau's friendship from an early date, considers that the French statesman might have faced the storm with success if he would but have consented to make terms with the Socialists. But he would not do so: he replied to Mr. Hyndman—'It is

These circumstances, which paralysed for many years the parliamentary activity of Clemenceau, have to be borne in mind when we examine his literary record. Without delay, in that spirit of prompt acceptance of the inevitable which has never ceased to mark his buoyant, elastic character, he threw himself into a new employment. He became, in his fifty-third year, one of the most active and persistent journalists in France. His fiery independence and his audacious vivacity pointed him out at once to editors who had the wit to cater for the better, that is to say for the livelier, class of readers. M. Clemenceau, a free lance if ever there was one, became the terror and the delight of *Le Figaro*, *La Justice*, and *Le Journal*, while to *La Dépêche de Toulouse* he contributed articles which presupposed a wider horizon and depended less on the passion of the moment. Future bibliographers, it may be, will search the files of these and other newspapers of that day for more and more numerous examples of his fecundity, since he embraced all subjects in what he called the huge forest of social existence. An exhibition of pictures, a new novel, an accident in the suburbs, a definition of God by M. Jules Simon, a joke by M. Francis Maynard, the effect of champagne upon labour unrest, the architecture of Chicago—nothing came amiss to the pen of a man whose curiosity about life was boundless, and whose facility in expression was volcanic.

But there was a certain group of subjects which, at this critical hour in his career, particularly attracted the attention of M. Clemenceau, and these give a special colour to the earliest, and perhaps the most remarkable, collection of his essays. A student of the temperament of the great statesman, as he has since then so pre-eminently shown himself to be, is bound to give his mind to the volume called 'La Mêlée Sociale' which M. Clemenceau published in 1895. This was practically his earliest bid for purely literary distinction, since the juvenile theses on anatomical subjects, and the translations from John Stuart Mill, hardly come within the category of literature.

'as useless to base any practical policy upon Socialist principles as it is 'chimerical to repose any confidence in Socialist votes.' When Mr. Hyndman urged that this attitude of hostility to all parties might lose him his seat in the Var, Clemenceau 'laughed at the very idea of such 'a defeat.' Nor has the conflict between him and the revolutionary Socialists ever ceased.

Between 1876 and 1885 M. Clemenceau had printed, or had permitted to be circulated, a certain number of his speeches in the Chamber; I have traced eight of these in the catalogue of M. Le Blond. These formed a very small fraction of his abundant eloquence in Parliament, and they were not particularly finished as specimens of lettered oratory. But between 1885 and 1895 we do not find even such slender evidences as these of the politician's desire to pose as an author. The publication of 'La Mêlée Sociale,' therefore, was, to speak practically, an experiment; it was the challenge of a new writer, or at least of a publicist who had never before competed with the recognised creators of books.

It is obvious that in making this experiment M. Clemenceau exercised a great deal of care and forethought. The articles reprinted are not presented haphazard, nor without an evident intention of producing the best effect possible. They are selected on a peculiar system from the mass of the journalist's miscellaneous output. The collection has a central idea, and this is developed in a very remarkable preface, which remains one of the author's most philosophical and most elaborate compositions. This central idea is the tragical one of the great vital conflict which pervades the world, has always pervaded it, and must ever remain unaffected by the superficial improvements of civilisation. All through the universe the various living organisms are in a condition of ceaseless contest. Everywhere something conquers something else which is conquered, and life sustains itself and ensures its own permanence by spreading death around it. Life, in fact, depends on death for its sustaining energy, and the fiercer the passion of vitality the more vehemently flourishes the instinct of destruction.

The imagination of the author of 'La Mêlée Sociale' broods upon the monstrous facts of natural history. If he traverses a woodland, he is conscious of a silent army of beasts and birds and insects, and even of trees and plants, which are waging ceaseless battle against others of their kind. If he begins to stir the soil of a meadow with his foot, he refrains with a shudder, since millions of corpses lie but just below the surface of the fruitful earth. He peers down into the depths of the sea, only to recognise that a prodigious and unflagging massacre of living forms is necessary to keep the ocean habitable for those who survive. Everywhere, throughout the universe, he finds carnage

triumphant; and eternal warfare is the symbol of the instinct of self-preservation.

It will be seen that the new author approached literature definitely from the scientific side, but also that he placed himself almost exclusively under the direction of English minds. M. Clemenceau, in that intense and unceasing contemplation of life which has been his most remarkable characteristic, has always been inspired by English models. In his early youth he was deeply impressed with the teaching of J. S. Mill, and in later years he was manifestly under the successive sway of Sir Charles Lyell and of Herbert Spencer. But by the time he collected his essays in 'La Mêlée Sociale,' he was completely infatuated by the system of Darwin. He had long been familiar with 'The Origin of Species' and 'The Descent of Man'; the death of Darwin in 1882 had deprived him of a master and, as it seemed, a friend, while the publication of the 'Life and Letters' in 1887 had given a coherency and, we may say, an atmosphere, to his conception of the illustrious English savant. When, therefore, M. Clemenceau put together the material of 'La Mêlée Sociale,' he did so in the quality of an advanced Darwinian, and he produced his first book almost as a tribute of affection to the memory of the great exponent of the tragedy of natural selection. But the habit of his mind, and no doubt the conditions of his own fortunes, led him into a field more tragical than any haunted by the spirit of the placid philosopher of Down. Charles Darwin refrained from pushing his observations to such sinister conclusions as this:—

'La mort, partout la mort. Les continents et les mers gémissent de l'effroyable offrande de massacre. C'est le cirque, l'immense Colysée de la Terre, où tout ce qui ne pouvait vivre que de mort, se pare de lumière et de vie pour mourir. De l'herbe à l'éléphant, pas d'autre loi que la loi du plus fort. Au nom de la même loi, le dernier né de l'évolution vivante confond tout ce qui est de vie dans une prodigieuse hécatombe offerte à la suprématie de sa race. Point de pitié. Le pouce retourné commande la mort. L'âme ingrate répudie l'antique solidarité des êtres enlacés en la chaine des générations transformées. Le cœur dur est fermé. Tout ce qui échappe au carnage prémédité, voulu, s'entretue pour la gloire du grand barbare. La splendeur de la floraison de vie s'éteint dans le sang, pour en renaître, pour y sombrer encore. Et le cirque, toujours vidé, s'emplit toujours.'

This passage may be taken as characteristic of the manner of M. Clemenceau in his most reflective mood, in the 'style bref,

'mais clair et vibrant,' which Octave Mirbeau commended. This way of writing would err on the side of rhetoric, were it not so concise and rapid, so full of the gusto of life even in its celebration of death. For, in the pages of 'La Mêlée Sociale,' M. Clemenceau shows himself interpenetrated by the sorrows rather than sustained by the possibilities of the tormented inhabitants of earth. Recent events, in his own life and in the history of the French nation, had impressed on his consciousness the inherent cruelty of human beings to one another. Like Wordsworth, and with a far sharper personal pang, he had good reason to lament what man has made of man. Moreover, the months which had extended between M. Clemenceau's political fall and the publication of 'La Mêlée Sociale' had been marked by violent unrest and by a succession of political crimes. Anarchism, hitherto more a theory and a threat than a practical element in the existence of the people, had taken startling prominence. In quick and formidable succession the crimes of Vaillant, of Émile Henry, of Caserio and others, had filled the minds of men with alarm and horror. These events, and the strikes in various trades with their attendant sabotage, and the unrest among the miners, and the earliest germination of that new disease of the State, syndicalism,—all these and many other evidences of renewed bitterness in the struggle for life created in the mind of M. Clemenceau an obsession which is reflected in every chapter of 'La Mêlée Sociale.' As a physician, no less than as a publicist, he diagnosed the 'misère physiologique' of the age, and he railed against those in power who touched with the tips of their white kid gloves the maladies which were blackening the surface and substance of human society. In the memory of the attempt made last February to assassinate M. Clemenceau, a special interest attaches to his discussion of this class of murders, of which he gave a remarkably close and prolonged analysis, little conceiving, of course, that he would live to be himself the object of a crime at which the whole world would shudder.

The reader who wishes the literary aspect of M. Clemenceau's mind to be revealed to him in its greatest amenity may next be recommended to turn to the preface of the volume entitled 'Le Grand Pan,' which appeared in 1896. The book itself consists of seventy little essays, reprinted from the *Figaro*, the *Echo de Paris*, and other newspapers. These have nothing or

very little to do with Pan, but they are eked out and given determination by a long rhapsody in honour of the goat-foot son of Callista, treated as the symbol of natural, as opposed to supernatural science. Everybody knows the famous passage in Plutarch which describes how Thamous the pilot, sailing out of the Gulf of Corinth towards the Ionian Sea on the eve of the crucifixion of Christ, heard a voice announce that 'Great Pan is dead!'

> 'And that dismal cry rose slowly
> And sank slowly through the air,
> Full of spirit's melancholy
> And eternity's despair!
> And they heard the words it said—
> Pan is dead—Great Pan is dead—
> Pan, Pan is dead.'

In a passage of rare picturesque beauty M. Clemenceau reproduces the animated and mysterious scene. He had himself lately returned from a visit to Greece, which had deeply stirred the sources of his sensibility. He recalled how the sun, in a transparency of pale gold, sank behind the blue mass of Ithaca, tinged with rose-colour the crags of the Echinades, and bathed the mountains and the sea in the delicate enchantment of sunset. He was sensitive to the paroxysm of pleasure such an experience produces, and he conceived himself standing by the side of the grammarian, Epitherses, on board the merchant-vessel, at the very moment when there sounded three times from the shore the name of Thamous, the Egyptian pilot, who answered at length, and received the mysterious command, 'When thou art opposite Palodes, announce that the great Pan is dead!' The recesses of the mountains, the caves on the island, the solitude of the drear battle-field of Actium, took up the hollow cry and reverberated it in a thousand accents of despair, with groans and shrieks of sorrow and confused bewailing, while all nature united in the echoing lamentation, 'Pan, great Pan, is dead!'

In this strange way M. Clemenceau opens an essay in defence of a purely positivist theory of human existence. He describes the doctrine of the pagan divinities, under the tyranny of Christianity, and he predicts their resurrection under clearer and calmer auspices. For M. Clemenceau, Pan is the symbol of life in its harmonious and composite action, and science is the intelligent worship of Pan. This despised and fallen god,

who seemed for one dark moment to be dead, survives and will return to his faithful adorers, has indeed returned already, and turns the tables on his priestly persecutors. The apparent death of Pan was but a sleep and a forgetting; the spirit of humanity, dominated for a moment by superstition and ignorance, seemed to be lying bound and mute, but it is vocal again, and its powers prove to be unshackled. The Orphic hymn, in dark numbers, had pronounced the sky and the sea, earth the universal and fire the immortal, to be the limbs of Pan. Under the early sway of Christianity the office and meaning of the pagan gods faded into mist; they seemed to disappear for ever. Darkness gathered over the sweet natural influences of the physical world, and reality was bartered for a feverish dream of heaven and hell.

But the gods were only preparing in silence for their ultimate resuscitation. Lactantius said that 'Idols and religion are two 'incompatible things'; in his famous 'De Origine Erroris,' conscious of the necessity of recognising a central force of energy in nature, the earliest Christian philosopher repulsed the notion of polytheism, and insisted that piety can exist only in the worship of the one God. He, like the Christian Fathers before him, shut up the spirit of man in a prison from which there seemed no escape. But the polytheists, thus violently Christianised against their will, remained pagan in essence, and they escaped, as by a miracle, from the furies of the Gospel and the Koran. The revolt was held in check through the Middle Ages; in the Renaissance it became victorious, and the first activity of man in liberty was an unconscious but none the less real restitution of the old liberating deities. The shepherds of Arcadia saw the blood come back into the marble face and hands of their dead god. Pan was moving on the earth once more, for he had triumphed over the sterile forces of dissolution. Pan, as ancient as social order itself, radiant master of the beneficent powers of light, has once more become the supreme deity. This, put briefly, is the thesis of M. Clemenceau.

The influence of Renan is manifest through the whole of this rhapsody, which is unique among the writings of its author. M. Clemenceau had followed the track of Pan through the valleys of Arcadia, and up the rocky pathways that rise abruptly from the stony bed of Alpheus. An actual visit to Greece, the date of which I have not verified, appears to have influenced

his imagination; he says, 'je l'ai voulu chercher, moi-même; 'au dépit de Thamous, près des antiques sources dolentes,' and he tells us how an avalanche of falling stones and a clatter of cloven hoofs overhead often made him fancy the deity almost within his grasp. In these passages M. Clemenceau reveals himself more plainly than anywhere else as an imaginative positivist, who permits his fancy to play with romantic and even fantastic visions, yet who is none the less essentially emancipated from everything but reality. He is never the dupe of his own symbol. He rejects natural religion no less firmly than revealed religion, and he will not submit his conscience to any supernatural authority. The reader, if he has the patience to do so, may follow the close parallelism of the purely intellectual positivism of the author with the charming, supple, elusive philosophy of Renan in his 'L'Avenir de la Science.'

In no other of his writings is M. Clemenceau quite so emancipated from the prejudice of the moment as he is in the preface to 'Le Grand Pan.' His central idea is one of satisfaction in the survival of the spirits of the dead gods, to whom, of course, he gives his own formula of definition. Nothing in history seems to affect him more painfully than the tragedy of the massacre of the sacred statues under Theodosius, when, as Gibbon has so eloquently described, the most high gods were exposed to the derision of the crowd, and then melted down. Where M. Clemenceau's emotion seems to be slightly deficient in logic is the parallel between these ancient gods who retain his sympathy, and the strictly impersonal forces of which he acknowledges them a symbol. He delights in Apollo, Pan, and Jove, and speaks of them almost as though they were individuals, yet he admits no sentimentality with regard to what they represent. On the whole, his attitude is not one of benignity. He confesses that nature reveals nothing but a system of forces interacting upon one another; it is not moral and it is not beneficent. Here the tone of 'Le Grand Pan' becomes identical with that of 'La Mêlée Sociale.' But we demand a clear definition of the central symbol. What does M. Clemenceau really mean us to understand by Pan? We push him up into a corner; we refuse to let him take refuge in his Renanesque imaginations, and we extract an answer at last. Pan is the source of all moral and intellectual action:

'Pan nous commande. Il faut agir. L'action est le principe,

l'action est le moyen, l'action est le but. L'action obstinée de tout l'homme au profit de tous, l'action désintéressée, supérieure aux puériles glorioles, aux rémunérations des rêves d'éternité, comme aux desespérances des batailles perdues ou de l'inéluctable mort, l'action en évolution d'idéal, unique force et totale vertu.'

The career of M. Clemenceau has been marked throughout by sudden and spasmodic crises, rather than by slow evolution of events. If this is true of his political history, it is repeated in his literary record. We need not, therefore, affect surprise at finding him, at the age of fifty-seven, and in the midst of the most bewildering distractions, produce his one and only novel, a modern story deliberately conducted to its close in four hundred pages. When 'Les Plus Forts' was published, in 1898, its author was extremely out of the fashion, and it passed almost unobserved from the press. Not a single Parisian critic, so far as I have discovered, gave it any serious attention, and it sank at once into an obscurity out of which the immense recent vogue of M. Clemenceau has only lately drawn it. 'Les Plus Forts' was issued at the darkest moment of the statesman's reversal, when he was repudiated by the great majority of those who adore him to-day. He had actually gone so far as to speak of his own as a 'vie manquée,' when a fresh opportunity of perilous service to the State fell in his way.

In October 1897 M. Ernest Vaughan, who had laid by a very considerable sum of money for the purpose of founding an efficient social and literary newspaper, approached Clemenceau with the offer of the editorship in chief. The famous *L'Aurore* came into existence, and it set sail at once in the stormy waters of the Dreyfus affair. Terrific was the clash of passions around the name of the mysterious Jew, whose exact character and definite purpose will perhaps never be completely elucidated. M. Clemenceau did not hesitate to throw the weight of his pen into the unpopular scale. When Esterhazy was acquitted he almost lost his self-control; with furious irony and snarling invectives he lashed the populace into a frenzy. Then followed (on the 13th of January 1898) the famous intervention of Zola, in a manifesto which rang from one end of the civilised world to the other. This was 'J'accuse,' the admirably effective title of which, so M. Maurice Le Blond assures us, was the invention of Clemenceau. Next month, at the Zola trial, Clemenceau defended the cause of justice in the teeth of enemies who did

not refrain from threatening his very life, and for two years *L'Aurore*, in the midst of the frenzied Dreyfus hurly-burly, was unflagging in its attacks and its rejoinders.

At such a moment M. Clemenceau sat down to write his solitary novel. It would be fulsome to represent 'Les Plus Forts' as a masterpiece of fiction, though in the present flush of the author's celebrity some have dared so to describe it. As a matter of fact it owes the interest which it possesses almost entirely to the light which it throws on the character of its author. As a mere romance, 'Les Plus Forts' suffers from the fact that its author, gifted in so many other directions, is not an effective narrator. As Dr. Johnson mischievously said of Congreve's one novel, 'Incognita,' it is easier to praise 'Les Plus Forts' than to read it. The scene is laid in a village deep in the heart of Poitou, and commentators have recognised a close reproduction of Mouilleron-en-Paradis, the hamlet near Fontenay where M. Clemenceau was born. At the moment of his fiercest struggle in Paris, his thoughts turned back to the cool woods and the still waters of his old home in the west, to the land of hollow valleys, and to the inexpressive sixteenth-century château which the doctor's child learned to regard as the symbol of rapine and tyranny in the past.

We are introduced to M. Henri, marquis de Puymaufray, a man of over sixty, solitary, a confirmed bachelor, not so good a shot as he used to be. The lonely old man comes back, defeated by life, to his château in Poitou. The mise-en-scène is lugubrious in the extreme, punctuated by the shrieking peacocks at noon and the hooting owls at night. When this impression has been sketched in, we turn back to the hero's early history, and follow the adventures of a young buck of the Second Empire, brought up to despise science, modern thought, the action of democracy in every form. He begins as a pontifical zouave in bondage to Rome; he ends as a sort of anarchist. The biography of the young and stupid nobleman is thus made a peg on which to hang dissertations on all the principal maladies which affected French society a quarter of a century ago. There is an exaggerated forceful woman, the Vicomtesse de Fourchamps, who plays a sustained but obscure part in the intrigue. What does she want? It is difficult to say; she is always 'preparing for the 'battle' or attempting to 'conquer' somebody. 'Il faut con-'quérir,' she incessantly repeats; she is a kind of tigress, and

she seems to be, in petticoats, a type of every social and political movement of which M. Clemenceau disapproves.

The Parisian scenes in M. Clemenceau's novel are not very amusing, and, oddly enough, they are weighed down by a sort of heavy gorgeousness, somewhat in the mode of Disraeli not at his best. All the characters preach, and the reader comes to sympathise with the vicomtesse when she declares herself 'agacée des sermons du marquis.' The young girl, Claude Harlé, is a somewhat shadowy heroine. She passes as the daughter of a rich industrial, but she is in reality the child of Puymaufray, who was the lover of her mother, since deceased. It is easy to understand that M. Clemenceau has taken this pathetic and tremulous figure as representative of what is chimerical in the society of the day. In her original condition, he puts into her mouth the crude sentiments which are supposed to be nurtured by the enemies of democracy. Claude calmly states that 'the good God has instituted two classes of human 'beings, the rich and the poor, and it is our duty to maintain our 'inferiors in the practices of religion.' A good deal of art is required to remove from such speeches as these the crude appearance of falsity; and it may be remarked that the pious characters in 'Les Plus Forts' are not more like real human beings than are the atheists in M. Paul Bourget's later romances.

What is of extraordinary interest in 'Les Plus Forts' is not the story itself, which is thin, nor the conduct of the adventures, which is stilted, but the temper and attitude of the writer. If we ask ourselves what is the principal characteristic of this novel, the answer must be—the intensity of action of the personages; they seem to have springs of steel in their insides; they run when other people walk, and cannot move without leaping in the air. 'Il faut aux conquérants la pleine sécurité 'de leur corps. Où l'âme conduit, la bête doit suivre.' The book is full of strange utterances of this order, which reveal the violence of the author's temperament in flashes of odd light. The episodes, the conversations, are little more than a series of irregular theses on various aspects of the struggle for life. The world is regarded as simply 'le syndicat des plus forts,' and this idea underlies the title of the book. We are not allowed to forget it, even when our attention is being switched away to the discipline of little Chinese children in a missionary

settlement, or to the importance of encouraging a manufacturer of paper in Ceylon

What is perhaps the most characteristic passage of M. Clemenceau's single novel may be quoted as an example both of his philosophy and of his style. It occurs in the course of a long conversation between father and daughter.

'Certes non, l'argent n'est pas tout. Il est trop, simplement. L'argent n'est pas tout, mais il a le genre humain pour clientèle, car il est devenu, de force libératrice, l'egoïsme tangible en rondelles de métal. Voilà pourquoi tout cède à l'universelle attraction qui n'est pas suffisamment contre-balancée par d'autres. L'argent n'est pas tout. Pourtant autour de lui se rassemblent toutes les autres puissances sociales, et celles-là même qui s'annoncèrent protectrices des hommes, aussitôt installées, par lui se sont agglomérées en tyrannie. Il a remplacé la force brutale, dit-on . . . à la condition de l'exprimer par d'autres signes. Contre l'expression du monde, il y avait Dieu autrefois, a dit quelqu'un. Peut-être. J'ai toujours trouvé Dieu du côté des plus forts.'

M. Clemenceau did not pause, meanwhile, from his journalistic labours, and he continued to offer to the public of Paris successive selections from the mass of his productions. On each of these occasions a preface, composed with more than usual care, gave the keynote to the series of essays, or rather suggested a tone of mind in which the reader would do well to study them. In the introduction to the volume of 1900, called 'Au Fil des Jours,' the author returned to his favourite theme, the struggle against the universally destructive forces of Nature. The life of man is concentrated on resistance to the persistent attacks upon it made by an army of inimical forces. The pride of existence is humbled by the inevitable fatality which governs the fortunes of the Olympian gods themselves. And it is useless to appeal, with the sentimental pantheists, to the beneficence of Nature, for Nature is the most relentless, the most indomitable of our enemies. In that extraordinary little tragedy of Victor Hugo, 'Mangeront-ils,' which has just been put on the stage in Paris, the vain appeal is made :—

'Est ce pas,
Nature, que tu haïs les semeurs de trépas,
Qui dans l'air frappent l'aigle et sur l'eau la sarcelle,
Et font partout saigner la vie universelle.'

With the clairvoyance of the biologist, M. Clemenceau divines the vanity of these remonstrances, and from the terrible cruelty of Nature he sees no relief save in vigorous action. 'Toute âme

'haute veut être de la mêlée.' The most troublous epochs are battles for the ideal, even at their worst moments. The only way to resist the destructive fatality of Nature is to strive for an amelioration of the lot of the human race. In all this, the texture of which is occasionally a little stretched when it is made to cover newspaper articles on the lighting of Paris or a show of prize pigeons, M. Clemenceau displays his eager wish to subordinate all his writing to a set of philosophical ideas. He has always held that the general impulses on which our daily existence depends reach us through the channels of thought. He is, therefore, a philosopher by determination, and he bases his own intellectual system on Pasteur and Spencer, on Darwin and J. S. Mill, on Taine and Renan. I have already spoken of the immense influence evidently exercised on Clemenceau by Renan's early and least ripe work, 'L'Avenir de la Science.' No doubt it was the reading of that remarkable book which led Clemenceau, already biassed in favour of materialism, to transfer to science all the passion which an earlier generation, and since his middle age a later generation, gave to religion. It must be understood that he does not belong in habit of mind or intellectual aspiration to the characteristic French tradition of to-day.

The great merit of M. Clemenceau, in the agitated years when he wielded a pen that was like a rapier, consisted in his fearless and disdainful audacity. He fought in literature exactly as he has always fought in politics, with the air of one who had no wish to conciliate his opponent, but always to browbeat him, to crush him by the weight of his argument, and then run him through the body with his irony. When we turn over the pages of his books, which suffer an inevitable loss from the fugitive nature of the themes on which they mainly expatiate, we are astounded at the ceaseless agility of the lucid, restless brain of the man. He is an acrobat, incessantly flinging himself with aerial lightness into some new impossible position. An article a day for twenty-five years,—what an expenditure of vital force that seems to sum up; and yet to-day, at the age of seventy-eight, the indefatigable brain and body seem as elastic as ever! The fullness of the material in M. Clemenceau's articles has always been a matter of amazement to those who know how much clever journalism is of the kind Francisque Sarcey described when he said, 'You may turn the tap as much as you

'please; if the cistern is empty, nothing but wind comes out!' But M. Clemenceau seemed always full, and copious as was the output, the reader had always the impression that there was much more behind.

We may regret that while the great politician was chiefly engaged in writing, namely between 1893 and 1903, he was obliged by circumstances to expend so much of his experience and his condition upon occasional issues. In turning over his pages, we must not forget that he wrote, not in the calm retirement of a study, but out in the street, in the midst of the battle and heat of the day. His insatiable appetite for action drove him forth into the madding crowd. There has always been something encyclopædic about his passion for knowledge, for practical acquaintance with the actual practice of life. He has cultivated a genius for observation, and his feverish career has been spent in pursuing knowledge, day by day, without giving himself time to arrange the trophies of his pursuit. He has published no systematic scheme of his philosophy, but has left us to gather it as well as we may from his prefaces, and most of all from 'Le Grand Pan.' As an author, we may sum him up as the latest, and in some respects the most vigorous and agile, of the disciples of the Encyclopædists. Like them, through a long and breathless career, he has ceaselessly striven to struggle upward into the light of knowledge.

EDMUND GOSSE.

RUSSIA AND THE PEACE CONFERENCE.

1. **Russia: A History Down to Modern Times.** By C. RAYMOND BEAZLEY, NEVILL FORBES, and G. A. BIRKETT. Oxford: Clarendon Press. 1918.
2. **The Eclipse of Russia.** By Dr. E. J. DILLON. J. M. Dent & Sons. 1918.
3. **The New Eastern Europe.** By RALPH BUTLER. Longmans, Green & Co. 1919.
4. **The League of Nations.** By General IAN SMUTS. Hodder & Stoughton. 1919.

THE war has awakened forces more subtle and raised issues more far-reaching than we had ever dreamt of, and these forces and these issues are represented in the most striking manner in the present condition of Russia. The past of Europe has prepared no ready-made solutions for such a crisis. Conventional habits of thought are useless here. That state of mind which favoured the application of internal party methods and principles to international politics is shocked into helplessness. Presumably in the present crash and confusion of all nationalisms every country, and every party in every country, will, to a large extent, continue to judge international events from the standpoint of its own interests and predilections, since, even after all the immense migrations of the war, we are still entangled in the mazes of our own immediate environment. Each country speaks its own language; no country can escape from its own traditions. And yet there are powers at work that compel us to rise above insular prejudice, and steady ourselves to a broader view. But how define and give substance to this broader view? Attempts are being made to capture the appalling complexities of an almost unintelligible world in a network of generalisations. But what if these generalisations are merely an exhalation from our own narrow and local convictions and even prejudices? Can we enchain the varied forces of history, and then interpret and embody them in a reasoned system of

world policy, so that at last man may be conscious master of the destinies of the world? Is it possible to impose on the whole world a durable constitution, so that we may steer our path with comparative safety into a future that seems replete with unlimited possibilities of danger?

The enterprise is tremendous, but it is not surprising that our sorely stricken generation has attempted it. The world has come tumbling together in the war; but although this precipitate and incredible juxtaposition of all the forces and forms of life that far-separated human groups had slowly established in all quarters of the planet has a desperate air of jagged confusion and ruin, there is in it after all a certain element of positive rapprochement, a surprising and involuntary trend towards union, a groping through catastrophe to a new and conscious unity.

The attempt to elucidate such a positive meaning from the present chaos, to interpret it in a sort of world constitution for the guidance and hope of distracted humanity might, if its scope were fully realised, be regarded as a gesture of despair. It is curious that the leaders of the victorious nations who are engaged in this hazardous enterprise do not apparently so regard it. And perhaps in this there is a wise provision of history. Our leaders are national leaders. Each of them is the exponent of a particular national experience, his outlook is to a certain extent limited by that experience, and he is bound to conceive of the manifold life of the world in the terms and by the standard of his own nation's temper and tendencies. That at least gives them confidence and courage to act, even if they make palpable and sometimes serious mistakes in the process of action. The terms of the new world constitution which they propose are based on the principles, on what some may regard as the shibboleths and platitudes, of particular local experiences, partly British, partly American, and to a certain extent French. That is only too obviously true.

And yet these considerations do not invalidate the idea of the League of Nations, which, with all the defects of its present terminology, is at least a suggestion, an adumbration, an earnest attempt to cope with and co-operate with the turbulent, alarming, and inspiring forces of history in a swiftly-awakening and crowded world. That the forces of history will not accept the dictates of the Paris Conference as final; that, in the vast and complete interaction of natural necessities and human emotions and institu-

tions, the League of Nations, representing a new urgency of the conscious human factor, may be modified and developed and moulded into new forms, is not a condemnation of the attempt or of the men who are making it. There is a compulsion upon them from all the nations to act. They can only act as history has made and chosen them. A too detached and comprehensive view might be fatal to all action, and indeed the spectacle of the vastness and confusion of the problems to be dealt with, and of the manifold conflicts of interest and view between the associated nations, has seriously enfeebled the action of the great Peace Conference in Paris. We are pursued beyond the war by those limitations, prejudices, and blindnesses which plunged us into the war that has exhausted us and largely destroyed our confidence and joy in human achievement. That is why we are beset by a sense of our own feebleness in the presence of vast elemental forces, and that is why every suggestion of reconstructive action such as that outlined in the League of Nations has a positive and effective value—even apart from the question of its practicability in detail—since it maintains a certain integrity of the will, and promises a gradual reconciliation between intelligent human effort and those elemental forces with which we have become so strangely at variance.

I am not suggesting that the League of Nations is going to solve the Russian problem. It is hard to tell as yet what form the League of Nations will take, what powers it will wield, what control it will exercise over various types of national individualism. At the present stage the value of the League of Nations scheme is perhaps rather psychological than practical. It is the only directive we have, the only indication of a way out of the chaos. It is one factor among others, not, as yet, the dominating factor, and it would serve for the moment no useful purpose to speculate as to its possible effects, say, on Russia. My view is rather, that for the present the Russian problem is a challenge and a criticism, that the whole complex of ideas, traditions, and aims represented at the Paris Conference is being subjected to the urgent and constant pressure of this challenge and criticism, and that the work of the Peace Conference must necessarily be imperfect so long as the Russian problem is left out of account, or—what is perhaps even more dangerous—if it is viewed in too narrow a perspective. The proposal to subject historical development

to a system, to rationalise it so to speak, to give it conscious direction, visible purpose, seems oddly fantastic and unreal, if viewed in connection with that welter of elemental forces in Russia. In Paris the groping human will is shadowing forth a scheme for regulating the future development of international relations. Russia is a warning that the work is as yet barely begun; that we must not be hasty in drawing our conclusions, settling our accounts, and establishing our system; that we must take into consideration forces and potencies which as yet we only dimly apprehend. Russia is a sharp criticism of the premises of the Peace Conference, a warning, certainly not against fundamental principles in themselves, but against the danger of excessively local and ephemeral interpretations of the fundamental principles of civilisation. The Russian situation summons suggested theories and schemes of history to the test of the wide-ranging powers of history itself.

One wearied and depressed representative of a small nationality said, after spending two months in Paris, 'It is 'not there that history is being made.' He was not wholly right. Some history is being made there. But it is emphatically true that, while Paris toilsomely deliberates, the world is stumbling and struggling along in some unguided way of its own, and that the signal example of the way in which history is making itself apart from the Paris Conference is Russia. Indeed the situation with which the Conference has to deal is not static, it is pre-eminently mobile, and the Conference, try as it may, can barely overtake the rapid course of events. Its work can only be a suggestion, an experiment, a beginning, a promising and hopeful beginning it may be, a hastily improvised reply to the urgent demand of the moment, which, for all we know, may gradually gather into itself the elements of permanence. The utmost that can be hoped is that, knowing that national life is a play of forces as yet dimly realised, we shall exercise our power of choice and make ourselves deliberately the instruments of the forces that we know to be good, and reject those we know to be evil.

To claim more at the present initial stage of reconstruction, to make excessive assumptions as to the authority and validity of the Conference schemes, is to provoke curious and dangerous reaction. History may take an unexpected revenge. The hypothesis still vaguely formulated may be wrecked by hasty or

ill-judged application, and by a too partial and one-sided estimate of the elements of the problem. The Fourteen Points and the League of Nations scheme constitute the platform of the Conference, and their tendencies are determined by the fact that they are products of an Anglo-Saxon mentality, and that their application is mainly controlled by Great Britain and America,—France, as a third, assenting. This situation has its advantages, but it also has its very serious drawbacks. The Anglo-Saxon civilisations have given the clearest proofs of virility during the later stages of historical development, and since they have been successful hitherto in the far-flung British Empire and in America, there is considerable justification for the hope that the principles on which they are based may be capable of even wider application, may indeed be made the foundation of a world polity. But the very fact that they are employed for such a purpose involves severe strain on these principles—granted even that they are adequately and broadly interpreted in the Fourteen Points and the League of Nations scheme. Thus imposed, they provoke severe criticism. These principles are put forward as being of universal validity in the new stage of world civilisation. A bewildered world has not yet had time to realise what this means, and with doubt and uncertainty, with misgiving and faint hope—seeing no other alternative—it is preparing to accede to the proposal.

But criticism is slowly becoming articulate, and our continental allies are in effect saying:—

'If this is the confession of faith of Great Britain and America, then the British Empire and America are in themselves very potent witnesses to that faith; and if as abstract ideas these generalisations and broad proposals do not very strongly appeal to us, yet reinforced and charged with power by the vigorous national life behind them, they do impress us very profoundly. But big and strong as the British Empire and America are, effective as their national organisation has proved to be, it does not necessarily follow that certain principles deduced from the character of their national development are capable of being erected into an absolute legislative system for the development of the whole world in the new era. It may be so, but this assumption on your part must be scrutinised very closely. May it not be, indeed, that the solemn assertion and imposition of the principles in which you feel most at home, the

proclamation of your particular faith, may conceal a claim for supreme power? For the time being you wield dictatorial power in virtue of your victory. Is your proposed constitution—framed in terms, novel indeed in their international application, but in their local application more familiar and more habitual to you than to us—intended to ensure the perpetuation of your supremacy?'

Such criticism is inevitable, and must sooner or later be faced. It exists among the Western Allies themselves; it is implicit in the Russian situation. The Peace Conference, in framing its reasoned scheme of the world, excludes Russia from its purview, or rather, after having in regard to Russia, as one diplomat has put it, twisted its principles into Prinkipo, has tried to leave the Russian problem for the time being out of the reckoning. That cannot be done. For the elemental forces of history which are refashioning Russia are also strongly affecting those more accessible problems which the Peace Conference is trying to solve by deliberate intellectual endeavour. Even Germany, while the Allies were slowly deciding how to make peace with her, was profoundly shaken under the influence of those convulsions of which Russia is the scene. History is destroying, remodelling, rebuilding gigantically, catastrophically, fantastically in the East, while the Allies from the Western fringe of Europe are trying to inform this chaos with an order of their own. And this Eastern process is a tremendous test of the power and permanence of the Allies' civilisation.

Strictly speaking, what has happened is this. The victory of the Allies is a victory of the maritime Powers, that is to say, of those Powers which, perhaps just because they are maritime, have attained in their polity the greatest liberty of individual initiative. Russia, perhaps because of the dimly realised aspirations of her people, because of some instinctive push of her national forces, found herself allied not with the Central European, but with the maritime Powers, and contributed greatly to their victory. But in straining after this victory, she overtaxed her national organisation, and not only was her despotic government overthrown, but she was plunged into a series of convulsions that endangered her national existence. Her condition affected those central empires with whom the Allies were at war, and when, after an exhausting struggle, the Allies did at last find themselves victorious, it was to see all the formerly despotic

empires, from the Rhine eastward, in ruins. The maritime States on the fringe of the continent were, at the end of the war, exhausted, but apparently intact, though themselves too affected to a certain extent by that vast process of disintegration which had swept across the Eurasian continent. Furthermore they could rely on the moral and material support of the United States, also a maritime Power, but bestriding another great continent, colonised from Europe, and imbued with Western European traditions. There are peculiarities in the position of America which need not be enlarged on for the moment. The point is that sea-air from America and Great Britain has swept through the continent, and that we are in presence of a vast process of transformation to which we are only to a limited degree able to give direction.

What form development will take in the new era, whether we shall swiftly succeed in establishing a polity of what has been called 'world-partnership' to which all national integrations will contribute, to which they will be subordinated, or whether the disintegration of the great political blocks of the continent and the victory of the sea Powers will be followed by something in the nature of a Macedonian and a Hellenistic period, it is impossible as yet to predict. But that, in the process of interaction between the sea and the Eurasian continent which has now begun and which will develop with increasing intensity, our own democratic polities may not suffer change, it would be rash to affirm. It is possible that the general result will be rather a pooling of polities than a one-sided imposition of these principles of polity which the sea Powers, more particularly the Anglo-Saxon Powers, have so far developed with the greatest energy and success. In any case premature system-making may plunge us into new dangers, history may repudiate our short-sighted decisions, and the peace that we make may be the prelude to new and vaster conflicts.

The Russian Revolution has a most important bearing on this problem. Indeed one is tempted to believe that the significance of Russia in this respect is all-important. Russia is the great hinterland of Europe, or rather, if Europe itself be regarded as a peninsula, Russia constitutes a large part of the main mass of the Eurasian continent. In this position she had gradually developed a great polity of her own which, looking back, one sees was far from being wholly inadequate to the

needs of her population at a time when distances were greater, movement was slower, and intercommunication was at a lower tension. If the war had not come, this extremely continental polity, this as yet rudimentary expression of the unity of the populations of a great plain, might gradually have divested itself of its glaring defects and might have evolved into a freer and more elastic order. But, for good or evil, the war came and plunged us suddenly into a realisation of the fact that we were passing into a culminating period, into latter days when distance was being annihilated, when there could no longer be any far and near, and when the world must, through vast catastrophe if by no other way, realise its unity. The Russian polity broke down under the strain—not, it must be emphasised now, because it was wholly inefficient for the previous purposes of national being, for even the higher political organisation of Germany broke down later, and the Western Powers themselves have felt and are feeling the strain most acutely—but because the world process was working in that way. And now Russia, the most continental of all the Powers, has become, with a sharpness and variety of suffering such as no nation has experienced, a great testing ground of all the polities, a scene of most scathing experiment upon the foundations of national existence. And if the Anglo-Saxon Powers are now offering the fruits of their past experience as a foundation for a world polity, Russia is making her own experience, is testing for herself the conditions and possibilities of her national existence, and the spectacle of her recklessly destructive and, ultimately perhaps creative, endeavour is a challenge that spreads wonder and doubt and uneasiness throughout the world.

Think of the beginning of the Revolution, when the old despotism had crashed down, when absolute liberty for a short time inspired the nation like the breath of spring, and when the air was full of generous enthusiasm for Anglo-Saxon ideals of government. The Provisional Government believed absolutely, it may be with a too implicit faith, in our doctrines of liberty. The people plunged joyfully into the great experiment; but, complicated by the psychology ingrained through long tutelage, by the incongruous circumstance of a great war, by the geographical and ethnical character of the country, and by the inability of remote Allies to understand or to help with their guidance, this experiment broke down. The Provisional

Government failed, but it failed largely through faith in our particular type of democracy, or rather through believing in the innate constructive power of the doctrine of our democracy, without taking into account its special national antecedents and the traditional checks and inconsistencies that are intertwined with our practice of the doctrine. And the nation plunged on into a further stage of experiment, crudely destructive and yet essentially instructive for such a remotely continental nation as the Russians are. It was an attempt to draw the extreme deductions from partially apprehended democratic theory. It was an attempt to put into practice on Russian soil the most advanced doctrines of European socialism.

The movement was reinforced by a strange Messianic spirit, by that passionate sectarian temper which has hitherto been characteristic of Russian dissent. Its motive forces were an eager, but untrained and untaught, instinct for liberty, a primitive rapacity, a desire absolutely to shake off the traces of age-long oppression, and a headlong, reckless impulse to test and try all forms of political doctrine. The result was a kind of politica Mahdiism, or rather something suggestive of the peculiar compound of Christianity with primitive heathenism founded in the Hauhau movement among the Maoris of New Zealand. The Russian people over-reached itself in its headlong effort, and its last state was worse than its first. Freedom culminated in a wild inversion of despotism. Under the name of Bolshevism, the most extreme type of revolutionary socialism, the worst features of the old régime were revived, as though a fatal atavism had ensnared the people in its precipitate search for liberty. Yet in its tyrannical rule Bolshevism almost completely destroyed the old machinery of the State, broke up the nation into its elements, fomented sectional differences, proclaimed civil war as a principle, expelled, killed, or enslaved the classes by whose operation the old State was maintained, and, in the desperate effort by the rude and vindictive dictatorship of a group of former exiles to mould the uneducated masses into agents of a wholly new type of State-construction, came within an ace of destroying Russian national existence altogether. As the extreme sects of old believers in the seventeenth century preached and practised in the forests of the north the doctrines of self-immolation in the name of a grim religious ideal, so the fanatical leaders of Bolshevik socialism did their utmost to

bring about the national self-immolation of Russia for the sake of the principle of international socialism. And, since their objects were specifically international, they hastened to throw brands from the Russia they had set ablaze to light the tinder for even greater conflagrations in the Western world. Their actions and their words were a bitter criticism of the democratic ideals in which we have hitherto lived and hoped.

Yet even the Bolsheviks could not destroy Russia. With all their efforts they could not control the Russian environment; indeed they were to a certain extent controlled by it in the strange processes of their rule. They could not escape from the atmosphere of the Russian past and the stern compulsion of the great plain. Repudiating history, they were inevitably forced into the line of history. Their very destruction was a fierce up-ploughing of fallow ground, a disorderly scattering of material preparatory to new building. They roused into action a number of disruptive forces that are disruptive because of the existence of Bolshevism, but may well unite in new construction. They have scattered elements of national existence, which, it may be, had to be scattered in order to reunite in new and more stable and more freely effective combinations. Above all, under the wild and destructive experiments of the Bolshevik régime, the Russian people has been brought cruelly, by bitter practical experience, face to face with the elementary problems of national existence. It has very nearly ruined the mechanism in the effort to discover how the wheels go round, but it has begun to understand how they go round, and why they must go round. And as a result of this astounding experiment in internationalism and of a very singular experience in relation to all the belligerent Powers, both the Central Powers and the maritime Allies, the national consciousness of the Russian people has been heightened.

The Bolshevist stage is passing, and must pass, since, itself a negation of liberty and an extreme assertion of materialism, it ends by exhausting its own doctrinal content, by destroying the material basis of its existence, and by provoking a reaction against its own despotism.

Russia is now in the throes of a new struggle for nation-making, most extraordinarily varied in character and quality, yet in all its forms obscurely tending to one end—the restoration of Russia. It is then a grave error to take too narrow or too

partial views of the present position of Russia, to regard her present distracted condition as permanent, or at any rate as causing a permanent diminution of her national vigour. What Dr. Dillon has aptly called 'the Eclipse of Russia' is not the sunset of her power; and the attempt to treat Russian problems piecemeal, to detach them from the fact and potency, from the past and the possible future of Russia herself, may lead to serious mistakes of perspective and unfortunate deflections of policy. This is the fault of Mr. Ralph Butler's admirably written and temperate book on 'The New Eastern Europe,' which approaches from the West, on the strength of information derived from non-Russian or anti-Russian sources, the problems of the nationalities on the western fringe of Russia and the question of the Ukraine, and arrives at conclusions curiously resembling, in certain respects, those of German advocates of the dismemberment of Russia. Similar tendencies are visible in spasmodic efforts on the part of the Peace Conference, or certain elements in the Peace Conference, to solve some Russian frontier problems piecemeal without reference to Russia herself, or on the assumption that Russia's temporary disappearance as an accessible political entity may justify such a form of tutelage. Therein lies the danger of General Smuts' suggestion, that Russia, like Austria and Turkey, is in the position of an empire defeated and broken up by the war, and that for that reason the mandatory system of the League of Nations might be made permanently operative in certain areas of Russian territory. The question of the position of the various nationalities that have been under Russian rule is intricate, and may be solved in various ways, but to approach it on the assumption that Russia is non-existent is to court failure and provoke fresh dangers.

At the present moment Russia is the arena of a very remarkable and very bewildering combination of centripetal and centrifugal forces. There you find linked together, in conflict or in more subtle interaction, strivings for individual liberty, unconscious tendencies and conscious efforts towards the revivification of the Russian national idea, acute national and social antagonisms, a raging of brutal forces and a strange tumult of ideal aspirations, faith turning into a bitter disillusionment, and disillusionment seeking for new faith, a desolate homelessness that makes more acute and urgent the search for a new home, or helplessness becoming a source of native energy for lack of

any sure helper; conflicts between doctrines and elemental needs, intrigues and heroisms, duplicity and devotion, revelations of the depths and the heights of human nature, strange and unexpected combinations of foreign influences and native reactions. And all this in a specific Russian atmosphere, determined by a long history and a particular natural environment, and determining in its turn the projection and development of this astounding confusion of events and aspirations into the future. It is no wonder that outsiders look on with bewilderment at this startling collapse of the Russia that was, and the multitudinous and perplexing suggestions of the possible emergence of a new Russia. Nothing like this has been provided for in the text-books, or in the prior experience of civilised nations; and the effect of these convulsions is far more disconcerting than that of the French Revolution, since their scope, like the scope of all the effort in which we have been engaged, is not merely European, but world-wide.

Bolshevism has tortured Northern and Central Russia for nearly eighteen months. It has ruled from the Kremlin with an iron hand and with fanatical unscrupulousness, and has reduced the masses of the people who welcomed its advent to a state of moral and physical exhaustion. In the first months following the Bolshevik triumph the doctrine and its exponents gained a temporary supremacy throughout the greater part of Russia. It spread like a religious mania, completely demoralising the army, and through the demoralisation of the army sweeping down every attempt at resistance, and breaking up the whole organisation of the State. The Ukrainian Nationalists in the southern provinces, who seized the occasion of the Bolshevist triumph to proclaim the independence of the Ukraine, soon found themselves submerged by the Bolshevist wave, and could offer but a feeble resistance. In the south-east the leaders of the Don Cossacks for a time made a stand in conjunction with a little volunteer force raised from among patriotic officers by General Alexeiev, who was later joined by Generals Kornilov and Denikin. But the Don Cossacks, demoralised from within through the return from the front of young Cossacks imbued with Bolshevik ideas, yielded to the onslaught of a large Bolshevik invading force. The Don territory was occupied, and Alexeiev's little volunteer army had to retire to the steppes, there to maintain a struggle of epic heroism.

In the meantime Lenin had to conclude a strange peace with Germany, while the Baltic Provinces and the Ukraine were yielded to enemy occupation. After the triumph of the Bolsheviks in Russia a Bolshevik revolution took place in Finland, and a régime was established which provoked, on the part of order-loving Finns, a resistance which was at first feeble, but gradually grew in strength. When, in March, the forces on both sides were almost equal the 'White' Government decided to call in the aid of the Germans. A German force was landed, and together with the 'White' Finnish Army routed the 'Reds,' and re-established, after a fierce struggle, a 'White' or non-Socialist Finnish Government at Helsingfors. The Germans were thus in effective control of the coasts of the Baltic and the Black Seas. Transcaucasia was first submerged by a destructive wave of Russian soldiery returning from the Turkish front demoralised by Bolshevik propaganda. The attempt of a small Georgian and Armenian force, ill-organised and hampered by Bolshevik peace negotiations and the hostility of their Tartar neighbours, to resist the following Turkish invasion, was doomed to failure, and at the critical moment, when the Turkish Army was on the point of overrunning Transcaucasia to destroy what the Bolsheviks had left, the Georgians appealed for German assistance. The Germans landed a force and kept the Turks at bay. For administrative purposes the Germans agreed to the establishment in the Caucasus of three so-called independent republics—Georgia, Armenia, and Azerbaijan. Azerbaijan (the provinces of Elizavetpol and Baku) being inhabited by Tartars, was left to the protection of the Tartars' kinsmen and co-religionists, the Turks.

In European Russia the territory ruled over by the Bolsheviks was thus reduced to the dimensions of sixteenth-century Muscovy. For a time Siberia remained under Bolshevik rule, but the spontaneous and gallant revolt of the Czecho-Slovaks suddenly cut off Lenin's Government from Siberia. Gradually the Czecho-Slovaks, together with freshly raised Russian forces and with some assistance from the Allies succeeded in ridding Siberia of Bolshevik rule, which had never struck deep roots in that immense and sparsely populated colony, and in enabling anti-Bolshevik Russians to begin a work of reconstruction. Lenin, confined to the territory of ancient Muscovy, practised under new conditions the methods of Ivan

the Terrible. And here, in passing, it may be noted that Russia, in its present condition, presents a curious jumble of all the periods of Russian history, as though the nation were pulling its own past up by the roots, and were engaged in a reckless and disorderly review of its own experiences. Fragments and specimens of the Kiev period, the period of the rule of turbulent local princes, various phases of the Muscovite period, suggestions of the Tartar yoke, of alien invasions from the West, reminiscences of Petrine wars, of ancient national conflicts long since supposed to be buried in oblivion—are all scattered about the surface of present-day Russian life in bewildering confusion. The peasants sometimes say now that Bolshevik rule is 'a new 'serfdom.' It is as though in this violent eruption all kinds of historical strata had emerged from the national sub-consciousness.

There were insurrections against Bolshevik rule which, as in Yaroslavl, were cruelly suppressed. The assassination of certain Bolshevik leaders and the attempt on Lenin led to the organised and systematic application of that 'Red Terror' which, from the first, the Bolsheviks had practised spontaneously. There began an exodus of the propertied and educated classes from Sovdepia, as Bolshevik Russia had come to be called, into the Ukraine, where by this time the Germans had overthrown the Ukrainian Socialist Government that they had re-established immediately after their entry into Kiev, and had set up a sort of semi-monarchical government under the Hetman, General Skoropadsky.

There were continual rumours and anticipations of Allied intervention. In July, the British with other Allies did land small forces in Murmansk and Archangel. But the expected rapid march into the interior did not take place. The Bolsheviks who, as Lenin declared after the landing at Archangel, regarded their position as 'hopeless,' were given time to recover from their panic, and they used the opportunity rapidly to promote the organisation of a Red Army which hardened its courage and developed a certain fighting capacity in unimportant skirmishes with the Allied forces. Indecision, divided counsels and absorption in the great struggle on the western front, paralysed Allied intervention in Russia. The months passed, and the watchword of Allied intervention gradually lost its power to rally hope or to inspire genuine fear. It remained a useful cry for Bolshevik

agitation, a plausible pretext for the formation of a Red Army.

Then suddenly came the Allied victory and the Armistice. And again events moved with startling and dramatic rapidity in all sorts of unexpected directions. It would take long to recount here the fantastic story of what has happened in Russia since the Armistice—the panic of the Bolsheviks, who believed that the Allies would and could immediately overthrow them; the gradual revival of their courage as the days passed and we struck no serious blow; the disorderly evacuation of the occupied territory by German troops suddenly demoralised by their own revolution and half-infected by Bolshevism; the complicated intrigues of the German command with Russian Bolsheviks; the curious blending of German reactionary and Bolshevik conspiracy; the adventures of our warships along the Baltic Coast, the curiously tentative and mixed occupation of the Black Sea littoral; the renewal of Bolshevik aggression in the regions evacuated by the Germans; the overthrow of Skoropadsky's government in Kiev by Ukrainian Socialists, and the subsequent overthrow of the Ukrainians by a Bolshevik invasion accompanied by insurrection; the successes and failures of the various nationalities; the amazing defeat of the Red Army at Narva by a little Esthonian force; the occupation of Riga by the Bolsheviks; the vicissitudes in Finland; and in all and through all the strange process of a revival of bankrupt Bolshevism, thanks to unexpected opportunities for aggression in Russia, an extension of propaganda abroad, and especially in the defeated countries, and direct association with the extremists of the German Revolution.

The effects of Bolshevism throughout Europe have yet to be estimated. But as far as Russia is concerned certain definite deductions are possible from the present confused situation. The first is that in Russia Bolshevism has entered upon its final phase, has, unless it is again favoured in some extraordinary way by the Allies, exhausted its possibilities. The evidence is overwhelming that the populations over which the Bolsheviks have ruled the longest have reached the stage of extreme disillusionment and of a reaction that is ineffective only because the people, disorganised, crushed, and starving, have not the means or the strength to rise *en masse* against their oppressors. The Red Army, as events in Esthonia have shown, is an

extremely untrustworthy instrument of little use against a well-armed and determined opponent. The Bolshevik Government cannot cope with the corruption and disaffection of its own followers. Nearly every one of its various fantastic administrative schemes has broken down miserably. Its fierce terrorist measures, its encouragement of plunder and of mass espionage, its efforts to break up the population into a chaos of warring classes and groups, all these are but devices for staving off for a time the inevitable downfall of their tyranny. And at the same time these very means, by destroying the substance of that society on which the Bolsheviks base their rule, are actually hastening their downfall.

The Bolsheviks themselves are living in a nightmare, they are possessed by a sort of criminal insanity, and their statesmanship has become the strange diabolical cunning of the madman that intimidates the sane.

But while Central and Northern Russia are in the depths of despair, and Bolshevism is working itself out there to its inevitable end, there are signs of hope and reviving energy on the outskirts of Russia. The struggle for the restoration of Russia has never ceased, and it is now beginning to give clear proof of solid achievement. In Siberia a central government has been established at Omsk, with Admiral Kolchak as ruler, and here with a certain, not overwhelming, measure of outside aid, in which our little British detachment has played an honourable part, the work of reconstruction has been begun, in the face of enormous difficulties, political and material. A real and effective administration has been established, an army has been created, in spite of a serious lack of munitions and tolerable means of transport, and with Siberia practically liberated, has undertaken a successful action westwards against the Bolsheviks. Admiral Kolchak is an able, resolute man of action, with broad views and a finely tempered character. In the British Press he is sometimes decried as a reactionary. As a matter of fact he is simply a Russian patriot, and he could not be a reactionary even if he would, for the Siberian peasants over whom he now rules are essentially practical, hard-headed democrats. In any case his declared programme is to lead Russia to a constituent assembly, and to secure land for the peasants and just and tolerable conditions for working men. Moreover, his government includes several Socialists who, however, are united with

him in recognising the necessity of a preliminary period of firm rule and strong discipline that shall re-establish the elementary conditions of political life.

Kolchak's supremacy is recognised by the Russian governments formed at other points of liberated Russian territory, by the main body of Russian political parties and organisations, and by the Russian Conference in Paris. This government has, therefore, the status of a government with which the Allies may confidently treat whenever they feel disposed to enter upon open and official negotiation with non-Bolshevik Russia. Kolchak's government has made the greatest progress in organisation, has the most secure financial basis, and rules over the largest extent of territory outside Bolshevik Russia. But it is to the centre of Denikin's army that the thoughts of Russian patriots turn with the greatest affection, as to the symbol of the stubborn continuity of the Russian State in the midst of overwhelming disaster. The story of the desperate struggle of this gallant little army in the south-eastern steppes is glorious even amid the great annals of this war. Its former leaders are dead. Kornilov was killed by a Bolshevik shell near Ekaterinodar last [illegible] Alexeiev died last October worn out with grief and suffering for his country. The army consisted at first almost solely of officers. Its strength last March was about 4000. Its casualties during the long months of impossible warfare have been over 30,000. Its strength now is over 100,000. It has fought unaided, overshadowed by Bolsheviks and Germans, and has not only maintained intact its own honour to the Allies and to Russia, it has vindicated the honour of the Russian name. Its present leader, General Denikin, is a clean strong man, and a gentleman, firm and tolerant, a devoted patriot, with every quality of a leader except that of personal ambition. He is a military man first and foremost, but both he and his political advisers are determined to discover and establish that type of strong and orderly democratic government which is best suited to promote the prosperity of the Russian State and the free development of the peoples of Russia.

Such is the character of the constructive elements which in various parts of Russia are gradually uniting their forces. And the first duty of the Allies who realise those immense possibilities of Russian development is to enter into direct relations with, and to give open and unswerving moral support to these con-

structive elements. That at least is clear, and that is the point to concentrate upon. Before all, the Russian State must be restored, and what are really subsidiary problems as to international status and internal organisation can be dealt with in relation to this central task. To reverse the order is to spoil the work. To deal with frontier problems until the outlines of the renewed Russian State are clearly visible is to reckon without the factor of greatest importance. To set up a number of new border states along the fringe of the Russian Empire without reference to Russian aspirations and necessities, without waiting for or promoting the re-establishment of Russia, is to endanger the existence of those proposed states, to serve the purposes of a reconstituted Germany, and to sow the seeds of very serious complications with Russia in the future. The re-establishment of Poland within her ethnographical frontiers is a question as to which there can be no dispute, but care should be taken that these eastern frontiers should be so determined as to prevent the possibility of friction with a restored Russia. The recognition of the independence of Finland under certain very precise conditions is also, in my opinion, inevitable. Beyond that we are on exceedingly debatable and dangerous ground in all Russian frontier questions. Any movement, for instance, on the part of the Allies in the direction of recognising Ukrainian independence would be to play with fire. The only sound method of approaching all these problems is to begin by concentrating on the re-establishment of the Russian State.

The most foolish of all policies in regard to Russia is to drift into methods of action or inaction that will have the effect of protracting the agony of Bolshevik rule. The disastrous results in this respect of mistaken action and suicidal inaction on the part of the Allies since the Armistice are already clearly manifest, and have seriously diminished our prestige in Russia. The fatal and incomprehensible Prinkipo proposal served the purposes of the Bolsheviks better than a score of military victories, and any other attempt to evade the real issue by half-measures that betray fear or irresolution will have the same effect. The least we can do is frankly to declare our determined hostility to the Bolsheviks, and to give, at any rate, open moral support to the Russia that will be, and must be, whether we wish it or not. If, indeed, the Allies desire to have a share in shaping the destinies of Russia, if we desire to secure

the hearty co-operation of Russia in a scheme of world reconstruction, it is imperatively necessary that unhesitating Allied support should be given to Russia now. Now is the opportunity when the great Eurasian continent is for the moment opened up to the revivifying influence of the maritime Powers.

We may go on blundering in futile action and more futile half-action. The great process of the re-emergence of the Russian nation may be accomplished without our vigorous and enlightened aid, or with only our petty, irritating and ill-conceived interference. Then it may pass through further stages of slow agony; it may assume startling forms, and may even culminate in a reaction. I hesitate to suggest these possibilities, but they exist, and they constitute a call for the clearest kind of action. More than that, such a long agony, embittered by the indifference, the divided counsels, or the folly of the Allies, may forge a bond between Russia and Germany; a Russian despotism might ultimately be associated with a new German despotism, and a new, massive, and intimidating continental block might be established that would bring to naught the dreams of a League of Nations, and would mock at the wasted opportunities of the maritime democracies. It may be that in other continents the maritime Powers would find some compensation for a gradual exclusion from the chief material resources of the Eurasian continent, but can such an abstract and hazardous possibility be an anchor for policy? And what would be the position of England then?

There is a clear call for England at any rate, generously to aid in the restoration of Russia now. Such a policy would be in the line of our noblest tradition, and would be in accord with our most vital interests.

HAROLD WILLIAMS.

THE MEDICAL HISTORY OF RUHLEBEN

RUHLEBEN has often been described; but a brief recapitulation of the salient features of the site and accommodation seems essential to the present narrative.

The place is a trotting race-course, with appurtenances, situated a few miles from Berlin. The principal buildings are three grand stands, a restaurant known as the 'tea-house,' a club-house known as the Casino, residential quarters and offices for various functionaries, and eleven stables—one of them built of wood and bricks, and the others of brick and concrete. These stables served as barracks for the prisoners, who were housed both in the horse-boxes (which were full of dung when they arrived) and in the lofts, normally used for storing fodder. Subsequently, as the number of the prisoners increased, several supplementary wooden barracks were hastily run up.

The floors and the walls of both the lofts and the boxes were of concrete. At first, the prisoners had to sleep on these concrete floors, on which an inadequate provision of straw—not over clean—was strewn. After an interval, straw-sacks—called, by courtesy, mattresses—were supplied; after a further interval, the occupants of the boxes were provided with plank beds. One blanket—usually, in fact, a worn and dilapidated horse-cloth—was each man's official allowance of bed clothes, though winter was already setting in: any other protection from the cold which any man needed he had to furnish at his own expense. Into each of the horse-boxes, about ten feet square, six men were crowded. The men in the dimly-lighted lofts were packed, shoulder to shoulder, all round the walls, and also up and down the middle; and in this confined space they had to live, sleep, eat, keep all their spare food and changes of linen, and dry their washing on improvised clothes lines, stretched from beam to beam.

Access to the actual race-course was, at first, strictly forbidden, men being allowed to walk and take exercise only in the stable yards, which were unpaved. The soil was a dry, loose, dirty

sand, which rain quickly transformed into mud. There was no surface drainage; and as there was a great deal of rain in the late autumn of 1914, the camp was generally a cold quagmire, swept by piercing winds from Poland and the Pinsk marshes, and interspersed with puddles, which swelled until they became lakes. Through this morass men had to wade, three times a day, for a distance of at least a quarter of a mile, to fetch their food from kitchens installed underneath the grand stands. Naturally, too, they had to traverse the same morass in order to reach the military latrines which had been dug for them: latrines which the American Ambassador once described as 'a danger not only to the camp but to Berlin,' and in which no disinfectants were ever used except those which the prisoners subscribed to purchase.

Among a miscellaneous company thus lodged, a good deal of illness was certain to occur; and that certainty was the greater because the power of resistance to disease was undermined by systematic underfeeding, and because the hardships had to be endured by invalids as well as healthy men. Exemption from internment was nominally only for the insane and the bed-ridden, and in practice not always even for these. There were men in the crowd already suffering from every kind of chronic and constitutional malady, from rheumatism to tuberculosis, and from syphilis to Bright's disease, diabetes, and eczema. Some of the cripples were so helpless that their friends had to carry them whenever they left the barrack for any purpose; and there were so many cripples that it was judged expedient to mobilise them in the barrack-yard in order that the pitiful spectacle might attract Mr. Gerard's attention on the day on which he paid his first visit of inspection. In short, the Germans had, by their methods and policy, deliberately created a medical problem, in the face of which they were to show themselves both callous and incompetent.

The medical officers of the camp were Dr. Lachmann and Dr. Reiche. The former looked benevolent, and was reputed to be considerate; but his powers were limited, and his time was short. One may sum up his career in the camp by saying that he died of appendicitis, and was regretted. If Dr. Reiche had died, no prisoner would have mourned for him, however painful and lingering his end. He was a military surgeon of the most brutal type, disposed to scamp his work and treat every patient

as a malingerer. His consultations, which began at 8 A.M., were often finished by 8.30; and it is related of him that, on one occasion, he spent ten minutes smoking cigarettes outside the door of a stable within which a prisoner was suffering agony from gall-stones, and finally walked away without doing anything to relieve the sufferer. He was, in short, a worthy medical representative of the *Gott strafe England* school, and would, in a just world, be mulcted in heavy damages for gross professional negligence, and perhaps even put on his trial for manslaughter. Happily, he was transferred, in the course of the first winter, to another post.

About his successor, Dr. Geiger, who made a much longer stay, opinions differed—perhaps because he was a man of varying moods, and one who contrived, in the course of time, to rise on stepping-stones of his dead self to higher things. He was a minute, meagre, and cadaverous man, who looked out upon the world through goggles nearly as large as gig-lamps and has been compared to 'a death's head moth determined to 'look jolly.' He had come from civil practice in the Harz Mountains, where, as he once told a sick man, he had 'left his 'feelings behind.' * He wore his uniform somewhat as if he had put it on to attend a fancy-dress ball, and appeared, until he settled down, to be distracted by two conflicting emotions—a venomous hatred of his enemies, and a sincere respect for his professional obligations. He seemed, on the whole, to know his work, though he did once diagnose a simple case of conjunctivitis as chronic inflammation of the cornea; but he showed malice by refusing to use anæsthetics when performing minor operations—once, even, when tapping a patient for pleurisy—and he was prone to neglect his duty in order to vindicate his dignity. Frequently, for example, he interrupted the consultations of prisoner patients who were seriously ill, and turned them out of the consulting-room into the cold passage while he prescribed pills and poultices for the simple ailments of German soldiers; and he refused to visit any patient in his box or loft, insisting that the bedridden must be brought to him on stretchers if they desired his advice. Naturally, a good many sick men took the view that the advice could not be worth the risk involved in that toilsome pilgrimage across a wind-swept swamp; and there were

* *Ich habe meine Gefühle zu Hause gelassen.*

even sufferers from double pneumonia who thought it safer to lie on their straw sacks than to visit the medical officer whose business it was to look after them.

In any case, whatever the value of Dr. Geiger's advice and medicaments, the conditions in which they were administered were grotesque and scandalous. There was no waiting-room: the patients awaited their turns in the passage, which was not heated, even in the dead of winter, and in which there were no seats except the window-sills. Stretcher patients—and the stretchers were very primitive appliances until the prisoners themselves bought better ones—were laid on the floor. Every now and again some other patient fainted and fell on the floor. It might be necessary to wait an hour or more in order to obtain admittance to the consulting-room; and there were days on which Dr. Geiger, though more conscientious than Dr. Reiche, cut his consultations prematurely short, and departed, leaving half the patients unattended to. As regards the scene within, here is a description of it, jotted down when the recollection was still fresh:—

'The essential fact is that a group—one might almost say a mob—of patients used to be admitted simultaneously, and that no man, however intimate his complaint, had any chance of confidential treatment. While one man was being ausculted, one saw another lying stripped on a dilapidated sofa, awaiting examination for suspected appendicitis, a third having his ears syringed, a fourth having the rash on his chest painted with iodine, a fifth having a cut or a sore bandaged, etc. Even when teeth were drawn, the room was not cleared. Those who liked to stay and look on were at liberty to do so, though the sensitive were free to retire. The groans of the wounded were audible, on these occasions, all down the passage; and the extraction was so hurriedly performed that the doctor was alleged, on one occasion, to have drawn not only the wrong tooth, but the tooth of the wrong man—operating on the interpreter instead of the sufferer, and hustling them both out of the room before they had time to expostulate or explain.'

This last story, it may be, is not so much true as well invented—a picturesque edifice raised on a foundation of inherent probability; but there were other stories of a graver order which called, and still call, for serious investigation. There is the story, for instance, of what the whole camp angrily spoke of as 'the murder of the jockey.' It is a case of which the rights were not quite clear even at the time; but the notes made after such restricted investigation as was then possible may usefully be reproduced:—

'That the poor jockey was turned out of the hospital and sent back to the camp at a time when he was dying of heart disease; that he knew his condition, and broke down and cried like a child in Dr. Geiger's consulting-room, pleading that he might be returned to the hospital; that Dr. Geiger refused his request, saying—and even writing to those who pleaded his case—that he was not so bad as they thought,* and that he died a few days afterwards: all these are facts which seem to be well established. But there was also a certain Generalartz from Berlin mixed up in the case, inspecting the hospital, and weeding out malingerers. It is possible that Dr. Geiger was afraid of him, or was overruled by him, or thought that he ought to defer to his wider experience. I have not the data for deciding; nor do I know whether it is true, as was said, that Dr. Geiger was reprimanded for endorsing the Generalartz's mistake instead of correcting it. What I do know is that the death seemed to give Dr. Geiger a shock—that he gave one the impression, for a time, of a man who had been frightened out of his boots.'

The matter, it will be seen, is clouded with a doubt; and one has no choice but to leave it so clouded until a proper inquiry can be set on foot and witnesses called and cross-examined. It does seem, at any rate, that Dr. Geiger experienced the goose-flesh which properly assails a professional man when he perceives that a grave mistake has had the gravest consequences; and it is the general verdict that, from the time of that lamentable error—whether of the judgment or of the heart—he became more careful, attentive, and efficient. He even succeeded in giving the impression that he was a man, on the whole, favourable to reform, though too weak and insignificant a man to press for reform in the face of obstruction from his superiors or to override the passive resistance of his subordinates. He would probably have liked to reform, though he certainly did not succeed in reforming, the hospital, referred to in the preceding paragraph, commonly known as the lazarett.

The original hospital was a small room with six beds and a bath tub, but without sanitary accommodation, close to the doctor's consulting-room. On one occasion, sufferers from dysentery were not only sent there but locked up there, and then severely reprimanded and threatened with punishment because of the use which they had been obliged to make of the bath. This room, however, was taken over, at an early

* *Nicht halb so schlimm wie Sie denken.* The communication was received in the captain's office.

date, for administrative purposes, and the patients were transferred to the aforesaid lazarett, which was situated about a quarter of a mile from the camp in the Auswandererbahnhof —a place in which, in peace time, steerage emigrants were inspected and disinfected before their departure to the United States.

It was the place to which all the prisoners were marched periodically, to be given warm shower baths; and they were the filthiest shower baths that any man among them had ever seen in his life. The floor of the room in which men dressed and undressed was always covered with a slimy mud deposited from the boots of previous bathers, and the clothes were hung up so close together that the lice, from which the camp was by no means free, could easily crawl from the costumes of the filthy to those of the clean. The hospital was just the sort of hospital which one would expect to find in connection with such an establishment: a place so appalling that the German authorities were ashamed of it, and would have concealed its existence from the medical officer who came from the American Embassy to inspect the camp if a prisoner had not whispered to him, in undiplomatic language, deliberately adopted for the purpose of provoking his curiosity: 'For God's 'sake don't go before you've inspected the lazarett; you'll find 'it bloody awful.'

The description was, indeed, as just as it was emphatic. Save for the fact that they had beds and could lie in them—very hard beds provided with very coarse sheets—the patients might almost as well not have been in hospital at all. The only special food supplied to them as invalids was a daily cup of beef tea. Beyond that, they received only the ordinary camp rations, which were carried over to them in buckets, and were, consequently, cold before they reached them. If they needed 'feeding up,' they had to procure the materials on their own initiative and at their own charge. Their movements outside the wards were so restricted that they got practically no exercise; the wards themselves were overheated, stuffy, and filthy. The smoke from passing railway engines blew through the windows when they were opened, and deposited a thick coating of grime on the floor, tables, and beds. The sick men had to wait on each other and do their own cleaning up; the doctor's visits were brief and cursory, and the general state of neglect

may be judged from the fact that a negro patient, too ill to move, was once allowed to lie for nine days, performing his natural functions in his bed.

The man in charge, to whom it would be absurd to give any more official or professional designation, was a non-commissioned officer named Wettin, in civil life an apothecary's assistant, described by a prisoner who had seen a good deal of him as 'one of the most evil, drunken scoundrels whom I 'have come across among Prussian under-officers.' Some other prisoners, with equal opportunities of judging, report that, though he was a bully by fits and starts, he was not invariably ill-natured in his cups; but it is, at any rate, an undisputed fact that what was, for a long time, the only hospital available at Ruhleben, was governed and administered by an habitual drunkard, and that this truculent rascal alternately hectored and hoodwinked the medical officer, who ought to have dismissed him in disgrace.

These statements do not rest merely upon the loose gossip of irritable patients. Authentic information on the subject was obtained from prisoners who visited the hospital daily, with the sanction of the authorities, for the purpose of cheering them, conveying their letters and messages to the camp, and rendering them various minor services. The first visitor was Professor F. Sefton Delmer, who has since acted as correspondent of the *Daily Mail* in Switzerland and Germany. The second was Mr. Melville, a Hamburg merchant; and Mr. Melville was so disgusted and indignant at the things which he observed that he made first a verbal and then a written report on the subject to the captains of the camp, repeated his written report when he found that it had produced no effect, and finally, when satisfied that the captains were powerless, sought and obtained an interview on the subject with Mr. Gerard.

It was a courageous thing to do in view of the rancour which the Germans always display when they dare towards those who put them in the wrong; and Mr. Melville paid the price of his temerity. His permit to visit the hospital was withdrawn, and a black mark was put against him, with the result that he never benefited by any of the exchanges of prisoners, though he was fully qualified to do so, but fell ill in the camp, and died of the *sequelæ* of rheumatic fever, in the sanatorium to which he was removed. Nor had he even the satisfaction of feeling that his

pertinacity had ensured the removal of the abuses. These continued in spite of the remonstrances of the American Embassy, for whose visit of inspection, indiscreetly announced beforehand, deceptive preparations were doubtless made. The man Wettin continued to get drunk, brewing grog for himself and his boon companions with the alcohol supplied for lotions and embrocations. Dr. Geiger, though not unaware of his iniquities, was too feeble a disciplinarian to stop them; and it was not until he collapsed and fell on his face on the floor, in one of his drunken bouts, in the presence of Dr. Geiger's successor, that he was deposed from his position.

But that is to anticipate. Long before the tardy reform of the lazarett, the steady pressure applied, in part by the American Embassy, but mainly by men in the camp itself, had secured improvement in certain other directions; and the first, though not really the most important, of the new departures, was an attempt to mitigate the harm done in the hospital by arranging for the accommodation of a certain number of invalids in an establishment known as Dr. Weiler's Sanatorium, where they were lodged for a charge of seven marks a day, paid by the British Government, with the option of obtaining better food and treatment if they cared to pay supplementary fees out of their own pockets.

Those who did pay the supplementary fee* had not, perhaps, a great deal to complain of, except that Dr. Weiler was making an undue profit out of them. As for the others, it would certainly have been easier for them to prove that they were being cheated than for Dr. Weiler to prove that they were being pampered. The reports of those of them who returned to the camp were carefully noted and collated with a view to future record, so that it is possible to give a summary of contemporary representations, written out in the autumn of 1915:—

'They are housed four, five, six, or more in one room, which is said to be sparsely furnished. Room for six inmates would contain, for instance, only one wash-basin, and none of the other utensils usually required in a bedroom. The food was poor, and the prisoners got no attendance whatever, had to make their own beds, fetch their own food, and wash up their own plates, etc. Some of the younger and less helpless prisoners were called upon to do other housework. At the time these arrangements were concluded, the usual charge in a first-class pension in that neighbourhood was five marks a day for full board and lodging;

* There were some who paid as much as thirty marks a day.

and that, of course, entitled the boarder to a well-furnished bedroom to himself, the usual attendance, and, of course, the use of the public rooms of the establishment. Although the cost of living in Germany had risen considerably, the charges of hotels and boa ding-houses had become much lower, so it is obvious that Dr. Weiler was grossly over-charging the British Government. . . . A large proportion, if not the majority, of the prisoners at Weiler's are pro-Germans, and some of them are not British subjects at all. I was told that a lunatic of unknown nationality, who could give no account of himself, was kept there at the expense of the British taxpayer.'

Decidedly it is a discreditable picture, reminiscent of Dotheboys Hall; and though, no doubt, in view of the state of the camp and the lazarett, the existence of the sanatorium was an advantage to other people besides the proprietor, it would have been a superfluous institution if the Germans had been willing to do their duty to their prisoners at their own expense, instead of charging them extortionate fees for an irreducible minimum of comfort. But that is the way of the Germans. Other medical treatment for which they persisted in charging fees, even to the destitute, was that provided by the dentist and the oculist; and a word must be said about the work done in both these branches.

For the first nine months or so, a German dentist attended the camp twice a week. He brought very few instruments with him, and operated without proper regard to antiseptic precautions. His incompetence was so gross that one of Dr. Geiger's orderlies—a genial and intelligent Alsatian—more than once recommended a man to avoid him and consult a prisoner dentist who was practising *sub rosa* in the camp. His charges were so extravagant that a notice was once given out in the barracks inviting those whom he had swindled to lodge formal complaints, though it is not on record that the lodging of a complaint ever led to the recovery of money. Eventually he was dismissed; and his practice was handed over to two fully qualified dentists among the prisoners—Dr. Rutterford and Dr. Moore—for whom a surgery was equipped at the cost of the camp.

The services of an oculist were not less necessary to the camp than those of a dentist, for the conditions of the life were such as to provide him with an abundance of patients. Many men's eyesight was permanently impaired by their confinement in dimly lighted lofts; and the drifting sand of the stable yards, infected by the expectoration of four or five thousand men, was a fruitful cause of a bad type of con-

junctivitis. The American Ambassador, therefore, made an arrangement with Dr. Halben, whose name is not unknown to the medical profession in England, and who was unquestionably competent. The question was raised, however, whether his skill quite warranted the extraordinary expedition with which he hurried through his work; and there were differences of opinion as to the correct interpretation of the agreement entered into concerning the fees. The arrangement was consequently cancelled; and as Dr. Halben belonged to no medical association which forbade its members to take legal proceedings for the recovery of their emoluments, he ended by serving writs on nearly all his patients. The matter was still *sub judice* when the Armistice was signed. Meanwhile, Dr. Halben's successor, Dr. Licht, was giving satisfaction.

That, however, is another anticipation. It is necessary to return to the normal medical treatment, officially and gratuitously provided.

The first—and, indeed, almost the last—thing to be said is that it was grossly inadequate, and that the men in the camp set to work, almost at once, to supplement it from their own resources, raising a fund for the provision of the medical supplies and comforts which any decent medical administration would have conceived it to be its own duty to provide. They bought kegs of aperient pills, and established distributing centres in the various barracks. In the face of official obstruction, they bought eggs and milk for the delicate. They even subscribed for such surgical appliances as bandages and trusses; for the German administration called upon the prisoners to pay for these things —and also for any but the simplest and cheapest medicines— out of their own pockets. And one of them—a Mr. Jephson, who had considerable medical knowledge—set up in his horse-box as a rival practitioner to Dr. Geiger, after procuring a stock of drugs from Berlin.

The competition was badly needed, if only in order to stimulate Dr. Geiger's energy. The competitor, assisted by English medical students, did specially useful work at a time when sore throats of unknown origin were raging in the camp; but his career of usefulness was short. Dr. Geiger heard what was going on, and exploded in a fit of professional jealousy. He sent for Mr. Jephson, and while Mr. Jephson was enduring cross-examination in Dr. Geiger's consulting-room, Dr. Geiger's

orderlies raided Mr. Jephson's box and carried off all his drugs. It was done in a high-handed manner, which aroused indignation in the camp; but Mr. Jephson had the gratification of knowing that both his practice and the extinction of it marked stages on the path of progress. Dr. Geiger became, thereafter, more attentive to his own obligations; and the next movement towards reform emanated from his consulting-room, to which it is now time to return.

It had not occurred to the Germans, in those days, that a doctor practising in an English camp ought to be equipped with a knowledge of the English language. Dr. Geiger could neither speak nor read English, and had little more than a nodding acquaintance with French. Most of the patients, therefore, had to bring interpreters to expound their symptoms, and translate the directions given to them. At first, each barrack appointed a separate interpreter; and the list of interpreters included, as might have been expected, a good many men who took no particular interest in the work, and had no special competence for it; some of them lacking the requisite human sympathy, and others, though fluent enough in ordinary conversation on the topics of the day, having an imperfect technical vocabulary. But there was one outstanding exception —Mr. Stanley Lambert; and the rest of this article will necessarily consist in the main of an account of the work which gradually came to be concentrated in Mr. Lambert's hands.

Mr. Lambert had had no medical training whatsoever—he was the continental representative of a London firm of coal exporters, and had been arrested at Hamburg, where he had endured the horrors of the hulks. He acted as medical interpreter for Barrack VIII., and also took an active part in the administration of the fund subscribed to purchase those medical comforts which the German Government ought to have provided but did not. Through this double activity, he was in closer contact than anyone else with the medical difficulties of the camp; and he proceeded to instal himself, without invitation, but with the tacit approval of every one concerned, as the permanent intermediary between the doctor and his patients. The other interpreters ceased to attend, perceiving that their attendance was superfluous; and Mr. Lambert gradually took sole charge, guarding the doctor's door, regulating the queue which awaited admission, translating, suggesting, and advising,

never failing in the tact on which there were continuous demands, and coming to be recognised by both doctor and patients as indispensable.

That was the beginning—a small beginning—but the prelude of much greater things. The real opportunity came, a little later, when Dr. Geiger decided that, as the arrangements at the lazarett seemed to be irremediably horrible, there should be built, within the precincts of the camp, a kind of convalescent home, to be known as the Schonungsbaracke, and Mr. Lambert was offered and accepted the office of superintendent of that barrack.

There had indeed been a previous Schonungsbaracke under the captaincy of Mr. Alexander Richardson; but it had been a failure, though the failure was not, in any sense, the captain's fault. It belonged to a period in the history of the camp when the Germans considered civil prisoners entitled to little more indulgence than convicts. It was a wooden hut, closely resembling all the other wooden huts—differing from them only in the fact that it possessed a stove. There were no beds. The invalids slept on the floor on their straw sacks, packed as closely as they would have been in any other part of the camp. They were given neither special food nor special attention; their captain had no powers, no opportunities—nothing to do except look on; and their one incidental advantage lay in the fact that the non-commissioned officers placed in charge of them happened to be good fellows, who used to be overheard, through the chinks in their bedroom wall, talking the social democratic heresy at the dead of night. Nothing was lost when the barrack was claimed for other purposes and its inmates were dispersed.

The new Schonungsbaracke, though far from perfect, was a very different place; and a description of it, in its original condition, written by one of its inmates, shall, with permission, be quoted:—

'This hut contained a waiting lobby, a room for the sanitary non-coms., a surgery, a small room for reserve stocks of medicine, two W.C.s, one of which was locked and reserved exclusively for the soldiers' use, the *revier Krankenstube*, or surgery ward, containing twelve beds, not superposed, twelve military night tables, two long wooden tables and benches, the room for chronic invalids, containing twenty-eight beds, superposed, and a room for the doctor's orderly. The only water tap in the hut was in the surgery—a brass hand-tap below which was a

narrow shallow sink, so that the floor in the neighbourhood of the tap was always wet. The surgery ward was simply supplied with the ordinary military bed, and patients, when they were ordered in, had to bring their own straw sack and rugs, neither of which were usually over clean. As the door leading to the surgery was always locked, there were no means of the sick even obtaining drinking-water, leaving the matter of washing or bathing entirely out of the question. When this was pointed out to Dr. Geiger, he remarked : *die Leute können sich nicht wenigstens unter der Wasserleitung besudeln.* There were no facilities for cooking. Dr. Geiger remarked that the only advantage was that the patients had not so far to walk for their food.'

Into that hut Mr. Lambert was, so to say, pitched, with a number of patients, and directions to make what he could of his limited opportunities. It was a position in which failure would have been easy, and success was possible only to a man of tact, energy, initiative, and talent for organisation, always ready to assume responsibility, and not afraid of breaking rules in emergencies. All these qualities, however, were happily forthcoming. Two energetic and competent lieutenants were found in Mr. Albert Smith of Shields and Mr. John Bean of Goole, who undertook to act as stewards of the barrack. They remained at their posts until they were exchanged in January 1918; and the success achieved was continuous and progressive.

The first necessity was to provide food suitable for the delicate—a thing which the Germans always grudged their prisoners, even when they had plenty of it for their own consumption. Prisoners whose parcels were well stocked and numerous offered what they could spare in the way of tinned soup, condensed milk, and biscuits; and an appeal addressed to friends in England met with a liberal response. The Central Prisoners of War Committee, the Khaki Prisoners of War Fund, the Lady Dodds' Prisoners of War Fund, the Prisoners of War Help Committee, the Invalids' Comfort Fund, and the Copenhagen branch of the Young Men's Christian Association, as well as a number of private benefactors, regularly dispatched generous supplies, not only of food, but also of blankets, clothing, medicine, and bandages. Scores of parcels consigned to the barrack were frequently delivered by a single post. Eventually, as a result of constant pressure, and in spite of Dr. Geiger's opposition, the barrack was provided with a small kitchen for invalid cookery;

while the inmates themselves turned its bare precincts into a flower garden.

Thus comfort was fought for, worked for, and achieved, until what was at first a poorly furnished hut with few conveniences became what boarding-house advertisements call a 'home from 'home'—a sanatorium, far more popular than Dr. Weiler's profiteering establishment, to which it became customary to send men from other parts of the camp for a few weeks' change of air and scene. A majority of the permanent inmates, however, were elderly and invalided seamen who ought to have been repatriated on the ground that their detention involved cruel danger to their health. Theoretically the German Government was always willing to permit the return of such men. Practically, it was always difficult to persuade Dr. Geiger to certify that the principle ought to be applied to any particular case; and in this connection Mr. Lambert rendered valuable and indefatigable service.

The men, as may be supposed, knew no German, and were quite incapable of pleading their own cause. They needed an advocate, and Mr. Lambert assumed that office. He singled out likely cases, mastered the details of the symptoms, and drew Dr. Geiger's attention to them. He was not satisfied with doing this once, but brought his men up to the doctor again and again, insisting that they were getting worse and worse, week after week, and, if necessary, month after month, until he got his way. He would have got it more often than he did had it not been for the obstructive and inhuman attitude of the German Admiralty which once replied to medical representations in favour of the release of certain sailors with the callous message: 'We don't care if they rot there.' In that matter, German obstinacy remained adamant until the very end; but in other respects the attitude of the authorities, and more particularly of the medical officers, gradually changed for the better.

The principal improvements date from the appointment, at his own request, of Dr. Kapp to act as Dr. Geiger's assistant. Dr. Kapp, though titularly Dr. Geiger's junior, was his senior in years, and a man of much better professional and social standing. In Berlin he was known as a dermatologist; but he had also practised in the West End of London as a 'beauty' specialist. He spoke English perfectly, had none but pleasant recollections

of his sojourn in the country, which he had not left until after the outbreak of war, and felt that Ruhleben was the sphere in which he could most usefully mitigate the sufferings of war. His good influence is said to have been felt, not only in the Schonungsbaracke, but also in other quarters of the camp. He certainly had a great deal of influence over Dr. Geiger, who had no influence whatever over him, but allowed himself to be pushed into sympathetic courses. When Dr. Geiger was transferred to other duties, Dr. Kapp found an acceptable collaborator in Dr. Lorenz, of whom all his patients speak well, and subsequently in Herr Schumann and Herr Marcuse, medical students in their final year, of whom report also speaks very favourably. At the time of the revolution, Dr. Kapp changed his clothes without changing his professional manner, announcing that he could do his work as well in mufti as in uniform, and that he meant to stick to it. He did stick to it until the train started for Sassnitz, and would have travelled to Sassnitz with his patients if he had not been seized with sudden illness, and, consequently, obliged to leave them in Mr. Lambert's charge.

It was under Dr. Kapp's régime that the efficiency of the hospital organisation was tested by epidemics; and a few words must next be said about these.

Ptomaine poisoning was the first cause of 'mass illness' in the camp. It was always endemic and intermittently epidemic—the attendant phenomena furnishing a crushing comment on the American Ambassador's suggestion that the latrines should be transferred to the race-course on the ground that men would only need to visit them in the day-time. Opinions differed as to whether rotten fish, rotten meat, or rice swept up, together with the excrement of mice, from the floors of filthy granaries was the most frequent cause. German measles came next; but the type of the outbreak was mild, and no one was seriously ill with it. Then, in the late summer and early autumn of 1915, virulent boils, most obstinate to treatment, became alarmingly prevalent. The poverty of the food, deficient not only in calories but in vitamines, was obviously responsible; and an improved parcels service was the remedy indicated. It is a matter in which the camp owed a great deal to the representations of Dr. Alonzo Taylor of the American Embassy, who sacrified himself to the extent of living on the food for several

successive days—taking precautions to see that no portions were specially selected for him—and pressing for reform in the spirit not only of a philanthropist, but also of a dietetic expert. His interference, however, was too energetic for the taste of the German authorities; and his visits had to cease before his task was completed. There still remained room for reform when his interrupted work was taken over by Dr. Roemer of the Dutch Legation.

A special camp committee was appointed to draw up a list of hygienic defects for Dr. Roemer's guidance, and was presented to him by Mr. Lambert on the ground that, if the complaints provoked German displeasure, the fewer men who were publicly implicated in the argument, the better. In particular, Dr. Roemer inspected the kitchen books, which showed the quantity and nature of the food served, and the number of men among whom it was divided. He pronounced the provision disgracefully inadequate, and extorted some concessions which Dr. Taylor had not succeeded in obtaining. It was as the result of his protests that rations of margarine, sugar, and jam were supplied for the first time, about three years after the institution of the camp.*

Meanwhile, the camp had to fight two other epidemics of a more serious nature than any which had previously appeared: the one of dysentery, and the other of influenza.

The outbreak of dysentery occurred in the summer of 1917, and was attributed to the water drawn from a pump in one of the stable yards, infected, in all probability, by infiltration from the latrines. It was a bad outbreak of a bad type. There were approximately 300 cases, many of them extremely serious, with high temperature. The patients were isolated in a hut just outside the camp, afterwards used for tuberculous cases. Mr. William Branson and Mr. Digby Lawson, who had previously been co-operating in the management of the Schonungsbaracke, voluntarily took charge of the isolation hut, and were completely cut off from the rest of the camp for

* Until that date practically no fats had been included in the rations.

several weeks.* Mr. Lawson contracted the disease in a very violent form, and had constant relapses and recurrences until he was at last transferred to internment in Holland. The value of the services which he and Mr. Branson rendered is attested by the fact that there were no fatal cases.

It was in the summer of the following year that the Spanish influenza appeared. The first case, presenting no pronounced symptoms, perplexed the physicians for two or three days; but the sudden occurrence of fifteen other similar cases cleared up their doubts, and the subsequent spread of the disease was rapid. Of the 2300 men at that time in the camp, about 1600 were attacked. There were both simple cases and complicated cases — the complications including bronchitis, pneumonia, liver trouble, and violent bleeding of the nose.† Both Dr. Kapp and Herr Schumann caught the complaint, though they were not, happily, incapacitated at the same time; and most of the hard work involved in fighting the epidemic fell to the Schonungsbaracke organisation.

Volunteers were called for; and as the pro-German element had, by that time, been pretty thoroughly weeded out of the camp, practically all those who were not themselves laid up came forward. The pneumonia cases were removed to the lazarett, which Dr. Kapp had insisted upon reforming; the serious cases of simple influenza were detained in the Schonungsbaracke and another hut set apart for them; the less grave cases had to be treated in the horse-boxes and the lofts. It was materially impossible for the doctors to keep a constant eye upon so many patients, scattered in so many different quarters; and a medical corps had to be improvised to assist them. The nucleus of the corps was furnished by three British medical students, Messrs. Flint, Douthwaite, and Garden, who, having been captured at an early stage of their training, had not yet supplemented their scientific knowledge with clinical experience,

* Mr. Branson had independently done much useful work in the camp. He was a professional masseur, and placed his skill at the service of those who needed it, undertaking gratuitously all massage prescribed by the doctors.

† There have been a number of cases of these hemorrhagic complications in the recent epidemic in England. Hemorrhage from the tongue as well as from the nose has occurred.

and Messrs. A. S. Belmont, T. W. Wilson, Alec Underwood, and R. Cheeseman, who had joined Mr. Lambert after the departure of Messrs. Branson and Lawson. These gentlemen worked indefatigably, nursing and watching cases, and reporting any appearance of change which called for medical intervention. Other men, who had not even their medical knowledge, worked with them; and though the majority of the workers found themselves incapacitated within thirty-six hours, fresh relays of workers were always ready to step forward and take their places,—the victims themselves generally returning to duty before they were quite convalescent.

It was a great effort, and it was crowned with success, for of the 1600 cases only two were fatal. While credit is certainly due to the German medical officers, no corresponding praise can be given to the German military authorities. They, at the height of the epidemic, caused a double barbed wire fence to be constructed across the camp, and gave orders that the gates should be opened only at intervals of ten minutes—an innovation which had no military *raison d'être*, and proved a great impediment to the medical work. The victory over influenza was, in short, in the main a British victory, and the upshot of the battle might have been very different, had it not been for the way in which the threads of the medical organisation had, in the course of the years, been gathered into Mr. Lambert's capable hands: a fact to which his fellow prisoners bore witness by presenting him with an illuminated address bearing more than two thousand signatures.

There was one branch of the medical service, however, into which neither Mr. Lambert nor anyone else ever succeeded in introducing any effective reform, because Berlin was obstinately stubborn. The surgical cases and those requiring the attention of specialists could not be treated either in the camp or at the lazarett. For a long time they used to be sent to Dr. Weiler's sanatorium, and, when that establishment was closed to the camp, the order came that all such cases should be transferred to the War Prisoners' Hospital in Berlin.

That hospital was an old cavalry stable, still reeking of the tan, situated at a great distance from the camp, and the conditions there were known to be unsatisfactory. Every effort was made to get the order rescinded, and to obtain permission for

patients to be sent to the Paulinen Haus zum Rothen Kreuz, Westend—a civilian hospital near the camp, to which Dr. Weiler had been accustomed to send patients whom he could not treat in his sanatorium, and of which all men spoke well. The appeal was supported by both the Ruhleben doctors and the Ruhleben Commandant; but Berlin remained obdurate, according the desired concession only in cases certified as unfit to be moved. Dr. Kapp, happily, gave the certificate in all cases in which he had a colourable excuse for doing so; but cases inevitably occurred in which no such excuse could be found; and the negligent treatment of these cases often had deplorable results. A patient sent to the hospital for a minor operation to one of his fingers was employed, while under treatment, in waiting on other patients in the diphtheria ward. A patient who had broken one of the bones in his wrist was returned to the camp with the wrist set in plaster, but with the fracture, as an X-ray examination showed, still unrepaired. A third patient, whose trouble was adenoids, contracted diphtheria and erysipelas in the hospital, and died of it. Patients urgently needing immediate treatment sometimes found no doctors in the place. The dispatch of medical comforts from Ruhleben for the use of the patients was rigorously forbidden. The prohibition was maintained in the face of repeated remonstrances; and a consignment which reached the hospital in spite of it was confiscated.

It was a bad business—the worse because the scandalous mismanagement was perfectly well known to the authorities, who made no attempt to improve it, but preferred to use the War Prisoners' Hospital as a place of punishment to which they could threaten to send any fractious prisoners who caused trouble. In at least one instance the threat was carried into effect.

The story ends, therefore, as it began, with the exposure of a scandal which Germany will find it difficult to live down. The record of the German authorities in the matter is bad from first to last, though not quite as bad at last as it was at first. They never initiated reforms, and they never quite ceased to obstruct them, passing only by slow degrees from a policy of active cruelty to one of more or less tolerant indifference. Some of their individual subordinates, as has been shown, fought a good fight against them, and succeeded in doing something to

save the good name of their country; but even their goodwill would have accomplished little if it had not been for the help sent from England, and the energy, enterprise, and power of organisation displayed by men within the camp to whom this article has paid its tribute. But for these things the death-rate would have been appalling, and the whole story of Ruhleben a tragedy. As it was, tragedy was averted, and the death-rate was kept low. The work which, in the British camps, was done, as a matter of course, by the administration, was there left to the resources and initiative of the prisoners themselves. They grappled with their task in a manner of which the country has every reason to be proud.

FRANCIS GRIBBLE.

THE UNIVERSITY IN NORTH AMERICA

1. **Opportunities for Foreign Students at Colleges and Universities in the United States.** By SAMUEL PAUL CAPEN. United States Bureau of Education.
2. **The University Record.** The University of Chicago Press.
3. **Studies in Higher Education in England and Scotland,** with suggestions for Universities and Colleges in the United States. By GEORGE EDWIN MACLEAN. United States Bureau of Education.
4. **Studies in Higher Education in Ireland and Wales.** By GEORGE EDWIN MACLEAN. United States Bureau of Education.
5. **The Money Value of Education.** By A. CASWELL ELLIS. United States Bureau of Education.
6. **Life at Yale.** Published by the Alumni Advisory Board of Yale University.

THE universities in America and Canada have been built up on very much the same plan, and what is said in this article applies almost equally to both the States and the Dominion. In their constitution and staff they vary *inter se* as much as do the universities of England, Scotland, and Ireland. This is equally true of their curricula and of their buildings.

Let us consider, in the first place, the buildings. These are sometimes in the heart of a big city, like Columbia University in New York City, Chicago University, Yale in Newhaven, the University of Tulane in New Orleans, Harvard in Cambridge, and many others. Sometimes they are in small towns hardly larger than villages, as in the case of Princeton and of the North-Western University at Evanston, Illinois, and the University of Wisconsin at Madison. Sometimes the buildings are scattered over large areas, and some of the departmental buildings may be separated from the main university by many miles. At the North-Western University just mentioned, the Schools of Medicine and Law are situate in the heart of Chicago, perhaps fifteen miles away from the central institution.

As a rule the ground upon which the buildings are scattered is called the 'campus,' but at Harvard it is known as the 'yard,' and a Harvard man is as irritated by a stranger calling his 'yard' the 'campus' as is a Cambridge man when anyone applies to his College 'courts' the Oxford term 'quads.' The

size of the universities also differs greatly. There are some with seven, or even more, thousand students. There are other institutions of university standing with only a few hundreds. But no American is frightened by size ; and some of the leading educationists in the United States contemplate without a qualm the growth of their institutions and the number of their students until they reach twenty or thirty, or even forty thousand. It is not, however, easy to get at really definite numbers, *i.e.*, the number of students who are actually reading for degrees. The Summer Courses, which are a great feature in some universities, and do not exist at all in others, swell these numbers ; but the summer visitor is seldom reading for a degree. Indeed, I came across one lady who helped in this direction by taking her 'summer course' of swimming in the really admirable university swimming-baths in the heart of one of the most heated cities of the eastern coast.

The older universities, such as Yale and Harvard, have a certain pride of antiquity and of race, and just as we are apt to say in England, 'He must be a Duke or he couldn't afford to 'dress so shabbily,' so they seem to exhibit a certain indifference to appearances. Some of their buildings are charming and suitable, others struck one as wanting closing 'for cleaning and 'repairs.' They are scattered about in great commercial cities, and they almost necessarily lack unity of design. Places like the University of Chicago and the Washington University at St. Louis, or the Rice Institute of Texas, have been built at one time and by one architect, or at any rate by one firm of architects, and they have a unity in architecture and in proportion.

The Roman Catholic universities seem to be particularly successful in selecting beautiful sites, with wide vistas both of town and country. They show an abiding faith, they build for all time, and they will wait for years to get the site they desire. Some of the chapels and public rooms in these institutions are most charmingly decorated. Some of the newly built universities, such as Columbia, the Rice Institute in Texas (for it is in effect a university), the Washington University at St. Louis, have very noble approaches ; long spacious avenues, and stately steps lead to their portals. Mechanical locomotion is now so universal in America that the authorities do not hesitate to 'pitch their tents' well out into the country, and usually on a height with a commanding view.

The American is bold in his plans, and buildings like the Massachusetts Technological Institute or Harvard Medical School are notable additions to the architecture of notable towns. As a rule within the buildings the staircases and passages are wide and spacious; elevators abound; and drinking water is laid down which bubbles up at frequent fountains. The dryness of the atmosphere in the rooms, which to the European seem very overheated, makes this provision necessary. A curious feature of American life is a distrust of the sun. The sun in the United States is a national asset, but even in the middle of the day the blinds will be drawn half-way down the windows and then the natural light of the heavens is supplemented by artificial illumination. Even if one left one's hotel room for half an hour, one always found on returning the blinds which one had drawn up were carefully and accurately drawn half-way down again. The lecture rooms are, as a rule, admirably adapted for their purpose, and the larger ones seem to possess almost perfect acoustic properties. The sitting accommodation is also a great improvement on the usual benches or chairs of European institutions.

In the last thirty years great efforts have been made to introduce artistic features into the colleges, and even into some of the business rooms, and especially is this the case in some of the ladies' establishments. Their bigger halls are decorated with really fine frescoes, or hung with noble pictures. The university libraries are on a very large scale. The books are easily and readily accessible. Any book that one requires is found for one in an astonishingly short time, but access to the shelves, which is such an enormous convenience to the student in the University of Cambridge, is not usually allowed. One feature of the more modern libraries is that each professor has a room assigned to him within its walls. True, it is generally a small room, but it enables him to meet his pupils in the library, and to draw their attention to literature 'ancient and modern.' The libraries are open longer than with us—from 9 A.M. till 10 P.M. At a ladies' college we heard that the library was open night and day, so that if a student had a brilliant idea in the middle of the night, she could fling on her dressing-gown and fly down to the library to verify her references before she forgot all about it. Many of these libraries have special collections of books which are periodically sent

for short periods to country centres, on somewhat the same system as the Local Lectures Syndicate at Cambridge loans books to local centres. A good example of such a circulating library is found in the McGill University at Montreal.

Some of the colleges occupy very large areas, for instance at Vassar, at Poughkeepsie on the Hudson, the campus contains more acres than there are lady students in the college, though there are many of them. This is by no means an isolated case. Princeton has lately bought up almost all the land between itself and the main railway line, and has recently excavated an artificial lake three miles long and in places three-quarters of a mile wide with money provided by Mr. Carnegie. Many of the universities have gigantic stadia, capable of seating forty to sixty thousand onlookers, for athletics play a very considerable part in the life of an American university. Talent is got hold of, and in some cases, perhaps not directly, is subsidised. Enormous crowds collect together to watch inter-university tests, and feeling runs very much higher than with us. Many alumni travel thousands of miles to watch these matches, and to add their voices to their college yell, which is considered to have a stimulating effect on the competing teams.

It should be understood that the Federal Government does not control education in the United States. To some extent it co-ordinates the educational systems of the different States, but the chief function of the Bureau of Education seems to be to issue reports—and very lengthy and able they often are—on the education of the whole country. At present it has little executive power, and the power controlling education in the United States is split up among forty-eight self-governing Commonwealths, or forty-nine if we include the District of Columbia where alone the Federal Government has control. Each State provides by law elementary education at the public expense. Children generally enter the school at six or seven years of age and leave eight years afterwards. Further, in each State there are public secondary schools called high schools, which continue the education of the people for another four years; and it is these high schools that provide the bulk of the material for the universities. There is a recent and growing tendency for these schools to specialise and to train their students in 'vocational' courses. Further, there are 'normal-

'schools' occupied with the training of teachers. Alongside these public institutions are numerous elementary schools, high schools, normal-schools, and even colleges, which are associated with various religious sects. For instance, the Roman Catholics control the education of a million and a half students, and these non-public institutions are allowed perfect freedom by the laws of every State. Such a multiplicity of educational authorities necessarily implies great variety in the standards exacted, which is usually lower in the newer and western States than it is in the east.

One of the difficulties of understanding the American universities arises from the use of the word 'college' for very widely differing institutions. Till the middle of the nineteenth century America did not use the larger word 'university,' and was content with 'college.' Universities practically did not exist, or rather they existed, but were called colleges. The oldest of these was Harvard College, founded in 1636 by John Harvard of Emmanuel College, Cambridge, who obtained immortality perhaps at a cheaper rate than any other human being, for his endowments only amounted to a few hundred pounds and a few books. These colleges were founded largely on the experience of Cambridge, and many of the first teachers came from East Anglia. At the beginning they were content with teaching classics, philosophy, and mathematics, and were in the main a training centre for the Ministry. Later other faculties arose.

Colleges developed into universities along three lines of evolution. Whilst continuing to teach the 'liberal arts,' some advanced further and established special professional schools of theology, law, and medicine. Thus they became training grounds for professional men. Further, there was a considerable development in pure and applied science. The establishment of the degree of B.Sc. corresponded with the building up of schools of engineering and other strictly professional courses. But perhaps the principal change of the last fifty years has been the foundation of numerous post-graduate schools, largely moulded by German influence. The dedications of the Johns Hopkins University at Baltimore in 1867 to post-graduate study, and post-graduate study alone, gave an immense impetus to the development of higher learning and research. At the present day undergraduates are admitted within its walls, but this

change does not meet with universal approval in Baltimore. These post-graduate schools provide courses leading to the M.A. and Ph.D. degrees.

The establishment of these special colleges or schools within a college is more or less a critical period of the metamorphosis of a college into a university. Princeton, which was only a college until comparatively recently, is regarded as justified in assuming the title of university, by the formation of its magnificent post-graduate school under the control of Dean West. With the growth of these graduate schools new subjects were introduced. Columbia University, for instance, offers the B.A. degree in forty-five different subjects, and other universities in almost as many.

The word college is also used by a very large number of institutions, some of them of considerable size, but as a rule smaller than the universities, but which play a large part in the education of the country. Some of these colleges still retain a close and restrictive connexion with some religious denomination, but the gilded unsectarianism of Mr. Carnegie has done much to break this down. Against this secularisation several of the Quaker colleges around Philadelphia have stood out, and characteristically have not suffered in pocket. One of the few educational institutions in America which has an English clientèle is the Quaker college of Haverford in Pennsylvania. Some of the leading Quakers in England regularly send their sons to Haverford for their college education.

In general the main difference between a college and a university may be expressed by saying that a college provides courses in the sciences and liberal arts which lead to a first degree, such as B.A. or B.Sc., whereas a university comprises one such college, and also several post-collegiate schools, the advanced studies of which lead to post-graduate degrees in arts, sciences, and professional subjects.

But, as already indicated, another striking difference between the college and the university is that of size. Colleges usually number from a hundred to five hundred, whereas the university has many thousands of students. Hence individual attention is far more common in a college than in a university, and this may possibly account for the claim that the colleges have produced a larger *percentage* of really eminent men and prominent citizens in all walks of life than have the universities.

Members of an American college are passionately devoted to the institution which has nurtured them. They become almost fanatical champions and partisans of their collegiate homes, and generously attribute any success they achieve in after life to the training which they have received there.

In every State but one or two there are now established State universities where the education is said to be free—that is to say, the State pays for the teaching. The expenses of residence, clothes, food, books, college, and travel subscriptions to the various clubs, of course fall on the student. The State legislatures control the expenditure of the university, and at Madison the professors of the State University of Wisconsin and the State legislators inhabit the same charming little city to their mutual and reciprocal advantage.

Growth of the State universities, which is marked in recent years, is not inimical to other universities in the same State. Rather it seems to benefit them by producing a healthy rivalry. There is, of course, a tendency in the State universities to specialise in directions which will most help the prosperity and the well-being of the State in which they are situate, and this is equally true of the civic universities, such as Cincinnati and others. The services of the staff of both State, civic, and endowed universities are very much more at the disposal of the community, or at any rate are more called upon than they would be in similar cases in Europe. The Federal Government frequently asks for and obtains the aid of the college and university presidents for international work. They are for a time 'seconded' and sent on special missions, or made for some years ambassadors at some important capital. For instance, President Angell, of the University of Michigan, was once ambassador at Constantinople, and once ambassador at Pekin, and he further served as the head of a very important mission to Great Britain.

The medical schools in connexion with the universities, such as we have seen at Harvard, in Cincinnati, and St. Louis, are the most wonderfully equipped that I have come across. What the young doctor does when he returns to practise in his village or small township, having been brought up in such institutions, it is difficult to understand. In the hospital he is trained in the very latest phase of scientific investigation and medical technique; at home these resources are denied him, even if his patient could afford them.

In many of the universities each student pays an annual tax of $5.00, which goes to form a Students' Medical Insurance Fund against disease or accidents. For this sum medical advice is given free, nursing is supplied free, and housing in a nursing-home, and special food for a limited period. Severe and lengthy cases are charged extra. In one of the State universities —Michigan—five full-time doctors were occupied in attending to the health and hygiene of the students, male and female.

Physical culture is carried on much more fully and universally than with us, and in the 'land grant' State universities army training is in force throughout the student's career.

Schools of journalism are common in American universities, and some of them have a very large number of pupils. It is very common in the United States to meet men in very substantial positions who started life as journalists. Many of the reporters are charmingly dressed young ladies, which adds to the difficulties of evading an interview. Horticulture is taught on a large scale at some of the State universities, and classes in commerce are widely spread. Here accountancy, commercial law, stenography, typewriting, and a little history and French are taught, and these vocational studies are somewhat mitigated by the student having to take some classic English author. One friend of mine was at the University of Pennsylvania broadening his mind by reading the classical works of Stevenson and of Kipling, but, I regret to say, he did not think much of either of them. At the North-Western University there is a School of Oratory, the products of which we had but little opportunity of testing.

At the American universities all ceremonial functions are carried out with great solemnity and dignity. The students take part in the proceedings and act as hosts to any distinguished guests that may be giving special lectures or receiving honorary degrees, and there is none of that humorous, but to the Public Orator trying, interruption of his stately periods. The whole of the proceedings are most carefully thought out and pre-ordained. There is always a University Marshal, generally one of the senior professors, who carries a baton and arranges the procession. On these occasions the University Musical Club generally plays a conspicuous part, and very often in the large towns the civic musical societies lend their help.

American undergraduates are very democratic, but there is

nothing very surprising about that. It is a common feature of all universities, even of the oldest, such as Bologna or Paris. What is surprising is the autocratic nature of the government in all their higher educational institutions, whereas Oxford and Cambridge are so democratic that little or no progress can be made. In England every M.A. who keeps his name on the boards of his college—and these 'boards' actually exist in the form of long planks with the names inscribed in large letters—has a vote which he can use as he thinks fit. The body of these M.A.'s, amounting to some thousands, is the *governing body* of these ancient universities. In America each college has a President, though the title varies slightly. For instance, there is a Chancellor at the Washington University at St. Louis, and a Provost at the University of Pennsylvania. Above the President stand the Trustees or Regents, who practically control the finances of the university. These trustees are men of high standing either in the commercial or political world. It is a great honour to be a trustee of a university, and however elected, the body is generally one of great distinction, and it works hard. Many of the lavish endowments which pour into these institutions are due to the activities of the trustees who are expected to provide the necessary dollars. In the eastern universities the trustees generally co-opt new members. In the State universities some at least are elected by the people and at the same time as the legislature is chosen. It is a remarkable and rather regrettable feature that the Faculty is not represented on this governing body, for in effect the latter really does mould the policy of the institution over which it presides. The link between the trustees and the professors is the President. Sometimes on a small body of trustees, one multi-millionaire, by increasing or withdrawing his financial support, can control the whole policy of the college, and there are cases where the interference of the trustees has not worked for good in the interests of the college. The president of a college is as autocratic as the captain of a liner or the head boy of an English public school. He can make or unmake careers, and has a very large voice in the appointment, dismissal, and pay of the professors.

In each faculty or department of the university there is a Dean—not necessarily the most senior of the professoriate—and the deans play an important and conspicuous part in the organisation of their institution. The deans have annual meet-

ings, and apparently spend a good deal of time in discussing their presidents. None of the staff is paid sufficiently. As everywhere else, and as it has been for all time, education is the worst paid of all human professions. 'The cheapest 'thing going to-day,' says the Satirist, 'is education.' 'I pay 'my cook,' said Crates ironically, 'four pounds a year; but a 'philosopher can be hired for about sixpence and a tutor for 'three half-pence.' 'So to-day,' writes Erasmus, 'a man stands 'aghast at the thought of paying for his boy's education a sum 'which would buy a foal or hire a farm servant.' 'Frugality— 'it is another name for madness!' After 400 years the madness of Erasmus has not abated. The presidents themselves are not adequately remunerated, and though some have entertainment allowances, it would go hard with them if they had not other sources of income than those attached to their posts.

American universities are not hampered by tradition. They are willing to try new things, and if one experiment does not succeed they try another. For instance, Columbia University is so attracted by the success of the psychological tests used for entry into the American Air Force that it is proposing to give up its entrance examination, and to replace it by mechanical tests, which it claims will be able to show whether a boy is capable of profiting by a university education. The result of this experiment is likely to prove interesting, and it may possibly be extended. If it does show the capabilities of a boy who undergoes it, and thus saves the expense and worry of written and oral examinations, these might be done away with. One foresees only one danger in these physical tests. The American youth is so alert and quick that he not infrequently reacts before the stimulus is applied. The historical first-year students of the same university, which is never anything if not up-to-date, will in future be required to start history with a study of the Bolshevist disorders in the twentieth century and other present-day problems. Earlier periods will be studied afterwards, with particular reference to their bearing upon the events of to-day.

The average entrance age to an American university is about the same as in England, and the course is a little longer. Three to four years are taken for the B.A. degree; about three more for the M.A. There is a tendency to increase the length of time required for the professional degrees, such

as those in law and medicine. A candidate who enters an American college or university is expected to have spent four years at a High School, and admission is given to such students as have obtained a given number of 'units.' A 'unit' roughly corresponds with a quarter of a year's study in any subject at one of these secondary schools, so that four years' study should produce sixteen such 'units.' A candidate has to produce evidence at most colleges or universities that he has completed fourteen or sixteen 'units,' and institutions requiring less than fourteen 'units' are not regarded as in the first class. Certain of the colleges and universities in the eastern States have co-ordinated their entrance qualifications under a College Entrance Examination Board, somewhat similar to that which exists in the northern universities of England. The standard of this Board is high, and a student is generally admitted by any of the eastern universities if he has passed the examination under the control of the Board in the subjects required by the college for entrance. Other universities, especially in the West and Middle West, and a few in the East, admit by certificate, this certificate being a statement from the headmaster of the school testifying as to the nature and amount of work done by the applicant. Such a certificate, if considered satisfactory, passes the candidate into the higher institution without further inquiry. The examination conducted by the Board is very complex, but the wind is tempered to the 'foreign' lamb, and foreigners, of whom there is a very large number being educated in the United States, receive concessions if they can show that they would really benefit by an advanced education.

Within the university the first-year men are 'freshmen,' the second-year men are 'sophomores,' a word which has fallen into desuetude in England. Third-year men are 'Juniors,' and fourth-year men are 'Seniors.'* There is a considerable and rather sharp cleavage between men of different years. For instance, in many of the luxurious clubs which in American universities, to some extent, replace the colleges of Oxford and

* Years ago I was watching the undergraduates scanning the lists of subjects and of lectures at Princeton for the coming year. After a summary and an impressed inspection I heard a sophomore say to a freshman, 'If we don't look out this Woodrow Wilson will turn our Princeton into a darned educational institution!'

Cambridge, only 'juniors' and 'seniors' are eligible for election. A freshman in an English university is apt to look upon a second-year man as immeasurably older than himself, and far more experienced in the conduct of life. The same is equally true in America. There are certain initiatory ceremonies which the freshman undergoes. These vary in different universities, and any attempt to interfere with them is futile, though they are sometimes accompanied with a certain measure of roughness. But they all tend to weld the newcomers into a 'class,' and a class is a very important factor in American university life. If you mention you are a graduate in one of their institutions you are at once asked, 'What class?' and the class dates from the year when you entered college. The class hangs together throughout life. It has a periodical re-union at its old university, when it usually avails itself of the opportunity for dressing-up which is dear to all mankind, but somewhat more suppressed on the eastern than the western side of the Atlantic. At one of these re-unions the class of a certain year will all appear dressed as cow-boys; next year the next class will be dressed as Mexicans, and so on.

Gradually the freshmen sort themselves into their various studies and into their various clubs. There are fewer opportunities in an American university for the great mass of the students to engage in athletics, though the picked men are made even more of than with us. As there are no colleges such as those of Oxford and Cambridge, there are no inter-collegiate competitions. There are, however, athletic contests between different classes. The rigour of the climate prevents outdoor exercise during a considerable part of the year. Unquestionably, one can play in the open air on more days in England than in the greater part of the States. This to some extent explains the perfection of the American indoor gymnasia. Even rowing is practised indoors in large tanks, where the boat is fixed, but the water travels.

Musical and Dramatic Clubs also abound, and the plays they produce are most admirably staged. It is far more frequent to meet an American student with a banjo or mandoline case under his arm than it is to meet an English undergraduate with a similar equipment. Their play and their music have a large part in the unofficial education of the young college men and maidens. In most of the colleges there is a permanent

outdoor theatre, like that which Bradfield has made familiar to us in England.

The 'unit' system is continued throughout the university course. One of the most striking differences between English and American universities is that in the latter there is no honours course. At Oxford or Cambridge a man reading for an B.A. degree can pass Responsions and 'Mods' or the 'Previous,' and after that devote himself to an intensive study of one subject for the whole of his three years. In most of the American universities a considerable number of subjects are taken, and these are not followed very far, at any rate not so far as in our honours course. Another great difference is that there is no one final examination which admits to the B.A. degree. On the elective system so many 'units' a year are taken, and at the end of the year the student is examined on each of these, and these annual examinations count towards the final degree. The only difference between the third-year examination and that of the first or of the second year is that it is taken in different subjects. Another difference which is often deplored in the United States is that the examinations are conducted only by the teachers. External examiners are unknown, so that the student is apt to get up his teacher's lectures rather than the subject.

All the bigger universities have really magnificent clubs, where sleeping accommodation is provided as well as good libraries and good dining-rooms. Some of these clubs, such as the Harvard Club at Boston, are very palatial, and most of the bigger eastern universities have stately club-houses in New York. In many small towns, such as Madison, where hotel accommodation is limited, the University Clubs offer a cultivated and comfortable shelter for college men. In others, such as Lexington in Kentucky, the University Club is housed in part of a really magnificent hotel. Many of the students live in dormitories, or as we should call them, college buildings; but meals are not served there, and it is still the custom for students to take their meals at various dining-rooms, and many students live and board in lodgings. Recently, however, enormous dining halls, some of them of great architectural dignity, have been springing up, and common meals are served there sometimes to as many as a thousand or twelve hundred students at a time.

Attendance at chapel varies in the different institutions. At Yale it is enforced, but enforced by an 'inviolable tradition that 'an institution of age and respectability hands down from the 'past to its youngest sons. The order is not of the faculty or 'powers above; far from it. It is the self-ordained task of the 'undergraduate.'

Those universities which have the opportunity at their door-step, are very devoted to rowing. Usually this is on a river, but at Princeton it takes place on the artificial lake already referred to, and at Madison on the charming lakes which encircle that very delightful little city. Track athletics, as the term runs, is also a favourite amusement, and the severity of the winter affords opportunities for skating and ice-boat competitions denied to the inhabitants of warmer countries. Football is a complete mystery to anyone who has not made an intensive study of American sports. There are all sorts of secret cries and code letters, and the captain directs the energies of his team by shouting mysterious cyphers which mean nothing to the outsider.

After graduation the alumnus seems to be even more passionately devoted to his university than he was while actually in residence in it. Apart from the large clubs already alluded to, there are innumerable associations, and in every town in America the members of one university get to know one another, and cling together like brothers. The 'class' system is a profound help in financing the universities. One 'class' will put up a dormitory, another will erect a new laboratory, and there is a strong spirit of inter-'class' rivalry, which is a great help to the financial management of their *alma mater*.

There are a number of subjects taught in American universities which are rarely found in educational institutions on this side of the Atlantic. Perhaps the commonest of these is dentistry. Large and fully-equipped dental colleges flourish in most of the endowed and State universities, and to these come men from all over the world. In the very heart of North America you will find students from Australia and South Africa, especially in the dental schools, where the professors take rank with those of other faculties. Veterinary science is also much followed, and in the agricultural schools, such as Ames in Iowa, they have an extremely complete course and fine laboratories devoted to the hygiene of the lower mammals. It was at Ames we came across a new discovery in vegetable pathology, which

is likely to open a new chapter in the history of plant disease. One of the professors there has definitely shown that the 'curled leaf' which yearly destroys so many million of beetroots is due to some organism transmitted by an insect; and although this organism is ultra-microscopic and passes through the finest filters, it evidently undergoes some transformations, both in the body of the leaf and in the tissues of the beetroot. It behaves, in effect, very much like the invisible organism conveyed by the mosquito, which sets up yellow fever in man. Similar experiments have shown that similar causes produce a certain disease in the potato. This is conveyed also by an insect.

It would take too long to enter into the subject of secret letter societies, which are banned in some universities and welcomed in others. There is a notion that the number of 'society men' in the colleges is decreasing, but at Yale at any rate this is not so. Forty years ago only some sixty per cent. of a 'class' belonged to any society. Five years ago the percentage had risen to seventy-five. The initiation into these secret societies is kept profoundly dark, and although the members of some of them have distinctive pins or rings which they wear upon their waistcoats, ties, or watch-chains, it is considered to be the height of ill-breeding to make the faintest reference to them. Anyone interested in the matter can obtain some insight into it by reading the somewhat sombre and certainly prolix 'Salt,' a novel which covers the ground of both the 'Loom of Youth' and 'Sinister Street,' but set in an American background. If 'Salt' be a true account of what happens in the admission of a member of a secret society to his society, it would seem that our young American barbarians at play have learned something from the Red Indians of the past. On the whole, the students are by no means so noisy as they were in years gone by; and as in the older universities of our land, the traditional 'town and 'gown rows' have almost disappeared.

Many of the undergraduates earn their living and pay their way whilst passing through college. Some of the poorer—the Armenians and the Greeks—manage to scrape together enough to live on by pressing the clothes, and sometimes cleaning the boots, of their more financially-favoured fellow-students. Many students make enough to see them through term by waiting at summer resorts in the vacations. Sir Michael Foster once told me that, returning from a lecturing tour in California, he was

stopping the night in Seattle, and was rather surprised when half-way through dinner the youth who was waiting on him, and who seemed to become suddenly aware whom he was serving, seized his hand and said, 'Professor, I am very glad to 'make your acquaintance! Many and many are the weary 'hours I have spent over your text-book.' The waiter in this case came from one of the eastern universities, and was paying his way through his course by waiting during the summer in Seattle. Others take care of some rich man's grounds, or stoke his furnaces. There is a strenuous desire to get a university degree, and men will sacrifice half their time to make enough money to spend the other half in preparing for their examinations. Another class often become secretaries or stenographers to the presidents or professors, and there is not that shyness in committing the conduct of the university politics to the students that obtains with us. Many obtain a livelihood by editing college papers. Some of them not only edit the journals, but set the type and print them.

There are, at present, nearly five thousand foreign students studying in American universities, and now that these institutions are making good in so many ways, one cannot but feel that the verse of Miss Mary Coleridge will become truer in a wider and larger sense:

> 'We were young, we were merry, we were very, very wise,
> And the door stood open at our feast,
> When there passed by a woman with the West in her eyes,
> And a man with his back to the East.'

For a while the world will wend westward.

A. E. Shipley.

ECONOMIC FALLACY IN INDUSTRY

DURING the war the present writer was engaged in organising and administering labour in many capacities for Government. In so doing he was continually involved in disputations as to theories fondly held by work-people. Many of these theories are in direct conflict with what he regards as the economic verities lying at the root of all industrial prosperity, whatever be the organisation of industry or society. This mass of economic fallacy he now purposes to describe.

It is desirable to indicate with some precision the circumstances under which the errors were encountered, and the sections of labour in which they appeared to circulate. A knowledge of the field of investigation, or the confines of the section of industry under observation, is essential in economics. In the early days of the war the writer acted as arbitrator for the Board of Trade in a large number of disputes in shops and yards, between engineering and shipyard trades and their respective employers, and in districts, between trade union district committees and the local associations of engineering or shipbuilding employers. These disputes usually turned on claims for increased wages, piece-prices, or improved conditions of employment. So far as applications for advances in wages were concerned, about half the claim would be founded on increase in the cost of living, the other half supported on various economic arguments advanced with great ability, sincerity, and force. Of these arguments the writer made a careful record, and is disposed to think that they may be taken to represent, not unfairly, opinions and convictions generally current among working men. They form an extraordinarily interesting collection for the practical student of economics.

Later, in 1916, the writer was appointed Chairman of the Clyde Dilution Commission to introduce dilution of labour into the engineering shops and shipyards on the Clyde. By 'dilution' was meant the substitution of a less-skilled person, usually a woman, to do the work of a more skilled man, so as to release the latter for duties of greater difficulty, arduousness, or

importance. Clydeside had up to that time doggedly resisted all attempts at dilution The procedure was to arrange with the district committees of the unions concerned a general project of dilution, and then, within its four corners, to apply to each particular establishment a special scheme adjusted to shop circumstances. In each establishment the Commission met a deputation of workmen, explained the scheme, gave them two days to consider it, and then returned to hear and dispose of their objections. Every possible exception was taken, not controverting the national necessity of dilution—that could not be challenged—but demurring to the present organisation of industry and raising numerous economic issues. Before the special business of the Commission could be approached, hours would be consumed in disposing of one economic fallacy after another. On the success achieved in that respect largely depended the progress in furthering dilution. Marx was quoted in one shop out of two. In six months 1500 meetings were held in different shops. Later the Commission passed on to the North-East Coast as the Tyne Dilution Commission. There was the same procedure, the same industrial debates as the prelude to all Commission business. True, less Marx appeared on the Tyne than on the Clyde, but there was the same keen economic controversy and the same familiar misconceptions. To Barrow the writer later went as Government Commissioner to organise labour in the shipbuilding and engineering trades. A similar course of business—one long succession of meetings, interminable economic arguments, a number of sharp bouts with some acutely intelligent and exceedingly astute Syndicalists, who put their case with great plausibility and had considerable power over the general body of workers. For six months, there were recurrent economic disputations, every now and then firing up into angry controversy. Ultimately the scheme of organisation of labour was carried through.

From Barrow the writer then proceeded to Liverpool in the late autumn of 1916, there to act as Government Commissioner for organising labour in shipbuilding, ship-repairing, and engineering works. It was impossible to achieve anything on Merseyside without similar protracted meetings with all the trades, and animated criticism of the fundamentals of industrial theory and practice. What specially added to the natural difficulty of the case on the Mersey was a small but effective combination of

Sinn Feiners and Syndicalists, whose industrial ideas were so advanced that the epithet revolutionary seems inadequate.

Later, in 1917, the writer was appointed Director of Shipyard Labour for the country generally. The work of his Department consisted of two main divisions, organising labour and regulating it. By 'regulating' is meant avoiding and adjusting industrial disputes; 'organising' included the introducing of time and labour-saving appliances, the initiation of schemes of payment by results, the extension of interchangeability of work and elimination of lines of demarcation of work between different trades, and the introduction of dilution. This brought the Department into immediate touch with and directly up against all the conservative prejudices and traditions of Labour. When these were analysed they were almost invariably seen to consist of economic ignorance and misconception.

In addition, as Chairman for two years of the National Tribunal on Women's Wages, the writer had ample opportunities for critical observation of the opinions prevailing amongst organised women workers.

Enough has probably been said to satisfy the most cautious reader that the views here advanced are at any rate founded on intimate experience of the sections of Labour concerned. As the result of this experience the writer is convinced that the suspicion and antagonism between employers and employed are very largely due to the non-acceptance or repudiation by Labour of economic truth. The Government urge the infusion into industry of a spirit of co-operation. That is truly the prime essential of the moment. But with large sections of work-people co-operation is diametrically opposed to the teaching they have imbibed for over half a century, and represents an ethical ideal only. Where ethical ideals stand opposed to recognised self-interest, they seldom make much advance. If, therefore, the ideal of co-operation between Capital and Labour is to be implanted in the minds of work-people as a living motive force, as the vital condition for the regeneration of industry, it is clear that economic false doctrine must be eradicated. Only when ideals substantially coincide with enlightened self-interest is there any certainty of progress in this world of human frailty and folly. That in industry, co-operation with employers, given a relationship of justice and equity, is in the best interests of the work-people, ought to admit of no dispute.

When Labour has been freed from its shackles of ignorance and has learned, as a matter of self-interest, this fundamental truth, then, and then only, can we expect a new spirit in industry.

In the writer's view, the three essentials in industry are contentment, co-operation, and production. Unless the work-people are contented they cannot be expected to co-operate with employers; unless there is co-operation there cannot be production; unless there is production there cannot be the financial means of contenting labour. These three essentials constitute the dynamic trinity of industry, a veritable magic circle. But it is useless putting it in such words to workmen. The writer has put it in this way: 'There are three big 'P's—Peace, Pulling together, and Production; they make 'the biggest P of all—Prosperity, for you, your employers, 'and your country.' The factors on which contentment depends are, in their respective order of importance:—(1) Security of employment; (2) a voice in fixing conditions of employment; (3) remuneration and fair division of profits; (4) working hours; (5) prevention of profiteering; (6) housing; (7) economic education; (8) opportunity to rise. There are other factors affecting contentment, but relatively of less importance. Co-operation, in its turn, depends on:—(1) Elimination of suspicion; (2) creation of confidence between employer and employed; (3) recognition of their mutual community of interest; (4) machinery for facilitating co-operation. Production primarily depends on:—(1) Economic education; (2) modernisation by employers of their methods; (3) repudiation by Labour of limitations on output and of demarcation restrictions; (4) a progressive national trade policy.

Let us deal with the misconceptions affecting the third of these three essentials, namely Production. They will be described in plain unvarnished language; not in the formal terminology of academic economics; for that is a language which, though it forms a somewhat debased currency among the intellectuals of Labour, is wholly unknown to the rank and file. What will be done is to state in as simple words as possible, divorced from all pedantry of expression, the fallacies concerning output which permeate the working classes. Foremost comes the belief that all the aspirations of Labour for increased remuneration, shorter hours, improved conditions of employment, can be satisfied to the full out of the present

profits of employers and present-day production. This has been argued incessantly before the writer. It is honestly believed that all that is necessary to liquidate the demands of Labour is to devote to that purpose part only of the existing profits of industry now in their entirety said to be appropriated by avaricious employers. The sole impediment is considered to be the greed of employers, and the fact that as industry is now organised they hold the money-bags. But this error can be exposed if the demands of Labour are reduced to a definite charge per annum on the industry in question, and each particular establishment involved. It can usually be shown on the actual accounts for typical establishments, at any rate in the engineering and shipbuilding industries, that the demands of Labour cannot be met out of existing profits. In fact, in many cases, if the whole of employers' present profits were handed over to Labour, and Capital left without any return whatsoever, the admittedly just demands of Labour could not be satisfied to anything like the full extent.

This delusion is one of the most pernicious in industry, because of its widespread acceptance and its dire results. It has been fostered by the war conditions. As employers made profits which exceeded in many cases those retainable under the Munitions of War or Finance Acts, it frequently did not matter to them what rate of wages they paid in order to expedite work. Moreover war advances far above the rate of wages were distributed under order of the Government Courts of Arbitration to cover the increased cost of living arising out of the abnormal conditions resulting from the war. These war advances were generally paid by Government, in addition to the contract price for munitions. Thus the workman saw very high nominal rates of wages paid, and the employers at the same time making much greater profits than they could by law appropriate. Nothing was, therefore, more natural than to suppose that all demands could on the present basis of output be satisfied out of existing profits. This idea is certainly an accepted belief. It apparently never occurred to anyone in authority to explain to the work-people that the so-called profits were purely fictitious, that they were not ordinary commercial profits, but were derived from money borrowed by the State with the obligation of repayment.

Accepting, as some sections of Labour will accept, that

their demands cannot be met simply out of employers' profits on present output, the alternative is, they say, that the manufacturer must raise his selling price by an amount sufficient to cover the extra cost. In this it is assumed, of course, that the rate of production remains the same. The idea is fixed that every manufacturer and the owners in every industry can raise prices without any difficulty whatsoever. In discussing this delusion, as the writer has frequently done, several points disclose themselves. First, that workmen do not appreciate the effect of an increase in the cost of production in reducing the ambit of the market for the sale of the commodity in question, or in lessening the demand for it in a specific market, with consequential curtailment of employment, and undermining of standard rates of wages. These results the writer has always found himself unable to drive home by hypothetical illustrations. In the minds of most work-people such illustrations are mere 'capitalistic cajolery.' Where definite cases can be given, however, of certain industries being killed or driven from the country through the forcing up of production costs, such concrete facts do carry conviction. The regulation retort is that any trade not able to pay proper wages ought not to live. That, of course, depends on what is 'proper.' When the wages are starvation wages every one will agree the industry ought not to live. When the wages, though sufficient to cover (1) subsistence, are not sufficient for (2) the reasonable amenities of life, nor to allow adequately for (3) trade-skill, there may be difference of opinion, according to the circumstances of the particular industry, whether it should be maintained or not. When, however, full and adequate remuneration is paid to cover (1), (2), and (3) it is a suicidal policy for Labour to insist on such advances in wages as must kill the industry.

In advancing the contention that if the employer cannot, out of his existing profits, pay the advance on wages claimed, it should be added to the sales price, workmen invariably repudiate as wholly immaterial the resultant effect on trades other than their own, and especially on the community. If those claiming the advance are engaged in what is inelegantly called a 'key industry,' that is to say, where their output is raw or semi-raw material for other industries, it is obvious that any rise in its cost may inflict serious damage on both employers and employed in the dependent industries. But the workman's

retort is 'let them pass it on.' The writer has had that put to him on hundreds of occasions. The effect on the community is dismissed as quite irrelevant.

During the war the fashion of general advances in wages to cover increased cost of living came into vogue. The consequent reaction on prices set up 'the vicious circle' known to all economists. A general advance in wages raises prices, thus forcing up the cost of living, and creating a fresh demand for a further increase in wages. Over and over again by simple illustrations the writer has tried to make this 'vicious circle' clear to workmen. He has always been much impeded by one circumstance. In the early days of the war, in certain districts, as soon as a general advance in wages was awarded by the wages tribunals, or conceded by Government, the various lodging-house keepers put up their rents for rooms, or their charge for board. This was stigmatised by Labour as 'profiteering.' Arguing by analogy, the work-people contended that, when a general rise in prices followed a general advance in wages, it was entirely due to profiteering. It was never admitted by the workmen that any part of the rise in prices was the natural, inevitable, logical result of the general advances in wages. War experiences have equally confused workmen's minds with regard to the effect of high wages on the volume of employment. Whatever glimmering suspicion the workmen had before the war that an advance in wages in many industries tended directly, through increased cost of production, to bring about unemployment, has now practically been dissipated by the war. Time after time the writer has been told that none of the general advances in wages during the war has ever caused unemployment. The explanation, of course, is that during the war workmen have not in great part been producing commodities for an ordinary commercial market, but munitions of war for the Government. All they could turn out the Government could take, so insatiable was its demand. Throughout the war, it must also be remembered, there was at all times a serious shortage of man-power.

Still dealing with production, we come to another dangerous and widespread fallacy, the assumed advantage of restricting output. This declares itself in many varied forms. One of the commonest is a definite limitation on the tonnage, or feet lineal or square, of the day's work. When the day's work is completed the workman, if paid on time, will frequently remain at work, but

doing nothing until the 'hooter goes.' In other cases, if paid on a piece-work basis, the workman will sometimes leave the shop after his day's work or 'stint' is finished. The writer has had experience of cases where workmen coming on at 7 A.M. finished their day's work and went home by 10.30 or 11 A.M. Other methods of achieving a similar end are less open. The operative instead of finishing his work early and then allowing his machine 'to cut air' for the rest of the day, will with nice calculation slow down all day long so as to spin out the allotted day's work more or less uniformly over the working day. Industrial experience during the war has proved the existence, to an almost inconceivable extent, of this latter method of limiting production. Perhaps the writer can best illustrate it from some cases within his own personal knowledge. In one instance some boys straight from a Board School were put on to do a simple operation from which men had been withdrawn for more arduous duty. Working at the men's piece-prices, they averaged £4. 15s. per normal working week against the men's £2. 10s. That meant the boys turned out—nor were they any the worse for it physically—almost twice the men's output. Women that the writer put on to replace men at some simple machining operations made, after a short period of training, £6-£10 per week against the men's £4-£5. The women were paid the men's piece-prices for the operation. In another case men who were working on piece-work, after learning of the announcement of the Minister of Munitions that under no circumstances would piece-prices be 'cut,' speeded up their output by 120 per cent. These are only a few selected cases out of a large number. They are concrete exemplifications of the appalling extent to which the false doctrine of limiting output is rampant in industry, and operative as an active orthodox trade union principle.

Various academic explanations have, from time to time, been given to the workers of the disadvantage to them of limiting output. Unfortunately they do not secure much acceptance in the workshop. The very terminology in which they are expressed, which has a precise meaning for the trained economist, has a different meaning in the workshops. Terms inevitably acquire strange meanings from consorting with false doctrines. By limiting output the workman genuinely believes that he is performing a moral duty to himself and to his trade. He believes, first, that he is reducing unemployment by making the

work go round; secondly, that he is keeping up the value of his handicraft by putting a premium on its application. Workmen have described to the writer the difference between possible and actual production as being 'their reserve fund.' Over and over again this policy has been justified to the writer by reference to the action of certain trade combinations which pool orders and limit the output of the works of certain of their members in order to ensure business for other members less fortunately situated, and also by reference to groups of manufacturers who systematically keep up prices by 'keeping the bottom in the market' through restricting the quantity of their output that is offered for sale. The workmen will tell you in words to which no economist can object that value is due to utility and to limitation of supply. What he overlooks is that all that is thereby established in practice is a minimum rate of wages, and that maximum earnings depend on maximum output. There are many classical instances, well within memory, where unemployment in certain trades was in fact almost entirely abolished by restricting the output of those employed, notably by discontinuing the then existing systems of payments by results—'blood money' it was called. These recollections live. But as a matter of fact these instances prove nothing. They occurred just about the commencement of a depression in trade, and, in fact, the extra cost of production subsequently involved through the limitation of output accelerated unemployment in those very trades. Still working men, like most men, argue from particular cases of personal experience to universals.

In the writer's view the only way to attack the heresy is from the concrete case of industry in the United States of America. There restriction of output is not merely unknown, but is definitely repudiated by the trade unions. This fact, however, is disbelieved by English workmen, though the recent statement made by Mr. Gompers should go some way to convince the sceptics. Unfortunately, many writers who have no knowledge of American conditions pervert the facts and hold up to execration the industrial organisation in the United States of America. 'Scientific management,' they have told the British workman, 'is merely cunningly devised slavery in which the 'shackles of serfdom are so precisely adjusted that the work-'man is a mere cog, helplessly and inhumanly enmeshed in a 'grinding anti-social mechanism.' The average workman,

however, pays little attention to rhetoric or rhodomontade, whether it emanates from agitators or politicians, and it has been found possible by the writer to satisfy small bodies of workmen as to the value of production by taking an American establishment and giving the output, hours and remuneration per man per annum, or any other convenient period of time, along with the output, hours and remuneration per man for the same period, in a comparable establishment in England. The output will be expressed, of course, in pounds sterling of wholesale market prices. This really does sink in. Then the moral can be driven home. The vital truth can be shown that in a well-run establishment, as output increases, the cost of the fixed charges per unit of production decreases. Consequently every percentage increase in output—assuming no 'softening' of the selling price—results in a larger percentage increase in the amount available for division between workmen and employer. If that division is effected on equitable lines, there is an obvious advantage to the worker. That is why the workman in the United States of America can take home much higher 'real' earnings than his brother in this country. It is not difficult to satisfy the hard-headed practical English worker that these higher American earnings are neither manna dropped from heaven nor doles from more compassionate employers.

If there is scepticism as to the trade union value of production, there is complete apathy as to the necessity of production for the nation's sake. What is wanted is to secure conviction of the need by simple homely illustrations. The extent to which in any community increased production conduces to plenty, and plenty to employment, good wages, a higher standard of living, and low prices is beyond the present ken of Labour. In other words, the proposition that the prosperity of the country depends upon production in the country obtains no credence whatsoever; it is generally treated by working men as a sheer irrelevance.

On the other side of the account very many employers, including under-managers and foremen, persistently cling to the hoary fallacy that however high the output may be, workmen are never worth high earnings. Such employers seem to think that the payment of high wages, even when accompanied by high output, is a reflection on the management of the shop. They constantly argue that high wages degenerate the workmen,

and lead to lost time. In order to reduce earnings, when they are considered to be inordinately high, piece-prices are 'cut' and time allowances are 'niggled.' This is a peculiarly English folly. No American employer would dream of it. The results in England are disastrous. With the fear of having his trade prices reduced, the workman will not 'go all out' but will limit output and maintain his earnings at such a figure as he thinks will not stimulate the employer to reduce prices or time allowances. In commencing a piece-job the operative will deliberately go slow so as to get a high price fixed, and thereby allow for any future cutting. The employer ought to know that the more jobs that pass through or over a workman's machine or bench in the shift or working day, the greater is the number of jobs over which standing and fixed charges and the invariable portion of the working costs are apportioned, and, therefore, the smaller is the debit on each operation, and the lower is the cost of production. If the employer can get high production, it is to his direct interest to allow high earnings for it. This is well accepted by American employers, and represents normal shop practice in the United States of America.

Anyone acquainted with industry in the United States of America and in England, cannot fail to notice one further striking contrast. In the United States of America time and labour-saving appliances, machines, and methods are being continually put into service by employers, and loyally operated by Labour. It is recognised as being in the joint interests of them both. It obviously is. Anything that results in a net reduction of output-cost after allowing for extra interest and depreciation benefits not merely employers, but also employed. In England, however, work-people seriously regard time and labour saving devices as inimical to their interests, and subversive of their trade-rights. It is contended that the introduction of such devices leads to the displacement of labour and to unemployment. In this connexion Labour has learned nothing from experience. Improved machinery has enormously improved the worker's lot. In the United States of America the resultant reduction in output-cost is admittedly the reason for the much higher 'real' wages of American workmen as compared with their English and Scottish confrères. Nor has it led to unemployment in the United States of America. There is no reason why it should, even temporarily. The introduction

of time and labour saving appliances is always a gradual process in any factory. Ordinary foresight and organisation by an employer ought to enable any men displaced still to be retained in employment. But many English employers have impeded the introduction of labour-saving devices by haggling over the readjustment of piece-rates in respect of the installation of machines giving an improved output.

The American employer, on the other hand, tries to maintain, as far as possible, the old piece-rates, with the result that the workmen's daily earnings are increased by the use of the new machine. The English employer is inclined to think that he is justified in reducing piece-rates so long as the workmen's daily earnings are maintained. It is unnecessary to point out which policy is most likely to attract the wage-earner to the use of improved machinery.

Nothing in industry is subject to so much misconception and ignorance, both among employers and employed, as the question of payment by results. The value of this method of payment in promoting production is indisputable. The writer has many actual cases in mind where the introduction of piece-work in place of time-work resulted in an increase of output up to 110 per cent., thereby materially reducing the cost of production. Yet, while in some trades, for example the cotton trade, the operatives refuse to work on any basis other than piece-work; in other trades, for example carpentering and many sections of engineering, piece-work is considered a 'pestilential system' (*sic*) tending to unemployment, degradation of the worker, and untold illimitable evils. It is in regard to payment by results on the premium bonus system that the greatest misconception prevails amongst both masters and men. That is a system under which a time is fixed for each job. If the job is done in less than that time, the time saved is divided in a definite proportion between employer and employed—generally half and half in England—and the latter paid for his portion at his ordinary time-rate. The system has provoked in this country, unlike the U.S.A., the greatest animosity on the part of the trade unions. Their point is that on a piece-work basis, where the man is paid a definite price for each article or operation, the more he does the more he is paid. For all time he saves in finishing an article, he receives the full benefit, the employer's benefit being the lower cost of production resulting

from increased output. What right then, it is argued, has the employer, like a parasite, to make anything out of the time which the worker saves on the premium-bonus system.

The argument is plausible, but misleading. It entirely overlooks the fact that under a piece-work system, where the workman is paid for all the time saved, prices are necessarily fixed on a much less liberal basis than time allowances on a premium-bonus basis. In the latter case, just because the employer gets a share of the time saved, he can adjust the rate generously, or as rate-fixers put it, 'fix the price loosely.' If production is to be furthered in this country, the whole question of payment proportioned to output must be lopped free of its perversion by certain employers and emancipated from the prejudice of trade unions. If displayed intelligibly in its true economic characteristics, the system will speak for itself. The actual rates to be fixed under any particular system are, of course, a fair matter for collective bargaining.

Up to this point, attention has been more or less concentrated on sophisms that militate against increase of production. Those that have been discussed are unquestionably the principal ones that protrude themselves in actual workshop practice. In addition, various doctrinaire hypotheses are put forward by revolutionary intellectuals who have allied themselves with Labour. Without one day's practical experience of workshop conditions, or ever having handled a tool in their lives, these visionaries—perfectly sincere in their aspirations—would reform and remodel industry. The best corrective is to educate the workmen to a right understanding of the vital necessity of increased production. Paradox though it may seem it would dispose of three-fourths of the existing troubles in industry, if workmen understood that whatever be the future organisation of industry, be it on the State Collectivist, Socio-Syndicalist, Syndicalist, or any other scheme, making in each case the largest assumption of practicability, production is the basis of prosperity. That is the first great lesson. As far as can be seen, no effort whatever is made to teach it to Labour, but the false prophet, the doctrinaire and the 'intellectual' industrialist are allowed, unchallenged, to asseverate and disseminate their specious sophistry.

We now come to a different class of fallacy, commonly met among the rank and file: the idea that to keep up the labour

costs of every operation or job is the best way to maintain the general value of the labour of the operatives concerned. An illustration may be taken from the engineering industry. In engineering, as is well known, England was the pioneer. The practice in early days was for a skilled turner or millwright, or other craftsman, to undertake a job, perform all the necessary machine and bench operations, and carry it through to completion. Later, as work increased in volume, and still later in diversity, there gradually evolved a differentiation between the turner and the fitter, and in more recent times, between turners and fitters and other kinds of engineering craftsmen. But the essence of the business was that every person concerned in the work should be a tradesman, or skilled man. In recent times the employers succeeded in establishing 'their right' to promote unskilled men, perhaps shop labourers, to work certain classes of machines, capstan and turret lathes, etc. These men were graded as machinists, and when the trade became organised, generally received about three-fourths of the skilled turner's rate. They were designated 'semi-skilled men.' The point to be observed is that any operation among the many thousands that constitute skilled work is deemed to be a 'skilled operation,' performable only by a skilled man, and if in special circumstances it is undertaken by any other person, supposing such an improbable case, it carries the full skilled rate of pay. Very similar, but somewhat less rigid, conventions exist in regard to semi-skilled work. The inflexible way in which the engineering unions enforce these trade practices has certainly reserved exclusively for the skilled men a large sphere of work ; but it keeps up production costs, and retards development of the industry. Whenever a new and improved machine has been introduced, a machine, say, of a type where the skill was mainly in the machine, and no longer to anything like the same degree required of the worker, there has been a constant struggle between the union district committees and the employers as to whether the machine should or should not be operated by a skilled man. Sometimes the employers have won, sometimes the unions; it is a pure question of relative strength. But the obvious waste of skill in employing one skilled man on one of these machines, when he could manage two or more, and the payment of the skilled rate, all added to the prevailing limitation of production, have discouraged many English employers,

never very keen at the best of times to modernise their methods, from installing up-to-date appliances, and so cheapening production.

This is not all the story. In the U.S.A. the invariable practice is to subdivide every job into its simple constituent operations, allocate each simple machine operation to a machine expressly designed, or 'set up' or 'rigged' for that special operation, and capable of being operated by any unskilled person after a very small modicum of training. So also in regard to non-machine operations, that is to say assembling or fitting. Each operation is allocated to a special person, in the first instance probably quite unskilled, who becomes proficient and efficient at this one line of work. There is little or no haggling about the remuneration of these unskilled operatives. The volume of production and the consequent ability to pay high wages obviate that. It is never contended by the Machinists' Union that all of these subdivided operations must be done by skilled men, and by them only. Yet in England it is practically a rule that no man in a union engineering workshop may lift a file and do the smallest amount of 'rough' filing unless he is a skilled fitter.

It is a platitude to insist that the natural and efficient evolution of industry involves subdivision. It is, in fact, the essential condition of efficiency and low production cost. It is equally obvious, from American experience, that there is nothing in subdivision really hurtful to the skilled men, their trade, or their standard of remuneration. Subdivision in the United States of America has led to an enormous output. All the vast number of machines involved must be set up, repaired, and periodically overhauled. Only the skilled men can do that. The machine 'tenders' or 'minders' must be supervised. That, again, is work for skilled men. All the tools for the machines must be ground, repaired, and in most cases 'set up' —more work, for which skilled men alone are suitable. In short, in the U.S.A., the skilled men enjoy better conditions, a higher status, and receive greater 'real' wages than the skilled men in this country. The latter must be helped to realise, and quickly, that their present policy of preserving for skilled men exclusively each simple constituent operation now included in skilled men's work, is detrimental to their interests, is stifling industry and strangling the trade of the nation.

At the same time a stern caution must be administered to certain employers. With labour charges so large a proportion of the costs of production, some employers are constantly on the outlook to pull down wages by fair means or foul. A slight alteration is made in the method of manufacture, or some device that would not deceive a first year's apprentice is fitted to a machine, and it is then claimed that the work has become such as entitles the employer to put unskilled or semi-skilled men on to it, or, alternatively, to reduce the skilled man's price. Sharp practice of that sort sours the shop. It intensifies enormously the difficulty, at present great enough, of the 'good' employer, struggling to reorganise his business fairly and properly, on efficient and honest subdivision lines. Present trade customs, as long as they effectively exist, must be honoured. No employer should be entitled to vary the accepted trade grading of the work or its accompanying rate of wages or prices, unless there is a genuine and substantial change in process or machinery, which in reality supplants the skill of the worker and manifestly increases production.

From production we pass to co-operation, the second of the three great essentials in industry. This is a nucleus round which a perfect maze of misconception has grown up. It would be but wearisome and useless to enumerate the various heresies which are in actual practice constantly encountered. They all proceed from the major premise that hostility between employer and employed is desirable, either as an end in itself or as a means to an end; as an end, in that it maintains Labour in such a condition of well-organised militancy that it can enforce concession of its terms; as a means, in the sense that it is the first step towards overturning the present organisation of industry and inaugurating the diverse and conflicting Utopias of the various revolutionaries. This fallacy can only be attacked by proving practically to work-people the complete interdependence of capital and labour, not by abstract argument, but in the language of and with illustrations borrowed from the workshop. The doctrinaires who for so long excluded the brain-worker from the category of producers are now admitting the necessity of capital but asseverate the superfluity of the capitalist. That makes it easier to demonstrate the community of interest between capital and labour.

As to how the task of demonstration can be undertaken the

writer's experience may be instructive. In one particular district he found his measures for organisation of labour completely thwarted by some extremists who persistently demanded, before any measures were accepted by the workmen, that the Government should expropriate the owners and hand over the works to the workers to run. It was apparent that all classes of industrial opinion were represented—State Socialists, Marxian Socialists, Socio-Syndicalists, Syndicalists, and several fancy industrial creeds. Business was adjourned for a week to allow the agitators time and a genuine opportunity to prepare a considered project. Every night for the week they met. They had the greatest difficulty in agreeing on a scheme. Finally, one was contrived, but admitted to be hardly workable by reason of the necessity of adjustments to please everybody. Each extremist seemed to distrust and dislike the proposals of a competing extremist rather more intensely than the existing state of things. Where the whole scheme broke down calamitously was over the elimination of the capitalist. Ultimately, and this is significant, the general body of workers, who kept a main eye on the security of their own interests, decided 'to put up with the existing state of things' rather than adventure on a new uncharted course. The writer was invited to recommence his negotiations, and, finally, procured the complete and harmonious adoption of his measures.

In the past, the airy schemes of the revolutionary idealist have been much too seriously treated as debatable propositions. That is to say, they have been assumed to be practical and practicable propositions, and as such have been discussed on the basis of relative expediency in comparison with the existing system of industry, improved however as all admit it must be improved. Such dialectic discussion is quite futile. Few men probably during the war have conducted more industrial arguments in all sorts of assemblages of labour than the writer. As his object was never to snatch a forensic triumph but always to convince and persuade, he never hesitated to put up his opinions for criticism in any concourse of workmen. Theoretical discussions, he has found, lead nowhere. Different schools of labour thought use the same economic terms not merely in different connotations but with a meaning fundamentally different from that of the trained economist. Thence conclusions are drawn necessarily varying from those of a

trained economist. That leaves a wide difference of view. Then the invariable procedure is that large hunks of some visionary's writings are quoted on one side, leaving the other side to cite orthodox economics. Such a method convinces nobody; it merely hardens ignorance.

What the writer has found alone avails is to take the revolutionary scheme of reconstruction that holds the field as favourite with the particular body of workmen concerned, then apply it pertinaciously to every detail of the particular establishment in which the workmen are engaged. It is generally the case that the revolutionary scheme has been framed by someone quite ignorant of the practical and every-day affairs of a workshop. It will not accommodate itself to the realities of the case, as, sooner or later, it would have, in practice, to be strictly and rigorously applied. This line of approach has over and over again been accepted as a fair and friendly test. It has a most convincing effect with workmen, transcending any theoretical disquisition. The person, however, who adopts this method requires to possess actual experience of workshop conditions and of the commercial side of the industry in addition to a knowledge of contemporary revolutionary Socialist and Syndicalist doctrine and an acquaintance with economics. If he has this knowledge he can usually show that popular revolutionary schemes are very broken reeds on which to rest the future welfare of the workers. The way is then clear to establish the real community of interest of labour and of capital, and the expediency not of abolishing, but of reforming the present organisation of industry. If this community of interest is proved to the satisfaction of the workers, the straight path to co-operation is opened. It must be added that not only the workers, but also very many employers, require to be taught fundamental economic truths in regard to co-operation between labour and capital.

But neither co-operation between labour and capital nor efficient production can be secured unless contentment prevails. Prominent among the causes of discontent are numerous ill-founded beliefs which act as powerful irritants upon the work-people's minds. A few only of these can be mentioned. The first and most important is in regard to 'profiteering.' There have unfortunately been many cases where persons by reason of the war and the necessities of the nation have made inordinate

profits as compared with the services rendered or the trouble, risk, and responsibility incurred. So far as such persons are concerned no repressive action, consistent with the maintenance of essential supplies, is too strong. But many workmen are subject to the hallucination that all the existing high prices are the result of profiteering. This delusion is universal and is the cause of much discontent. The whole economic basis of prices needs to be expounded. If profiteering means taking as much return for one's outlay or services as circumstances permit, is not the workman himself a profiteer? If a consumer selects his shop with a view to getting the best value for his money is not he also a profiteer? If on the contrary, as many work-people seem to assume, profiteering means the forcible exaction of an arbitrary price, why do prices ever come down?

The effect on prices of the inflation of the currency is wholly disregarded by work-people. It is very necessary that it should be explained and understood. The wildest views have been expounded to the writer in some advanced centres. It has even been said, 'If there are not sufficient profits in industry 'to pay us the wages we ask, then all the Government has to 'do is to create the necessary paper money and use that.' Such proposals have been solemnly advanced by perfectly honest men who obviously believed in their soundness. They said that it was merely the desire of the Government to back up the capitalists that prevented adoption of the remedy. That such views should be accepted by any substantial body of work-people is a serious menace to national prosperity.

The delusions above touched upon cannot justly be described as 'heresy contumaciously adhered to.' They are in most cases honest misconceptions, and no solution of the labour problem is possible until all this error and mistaken belief has been swept away. That cannot be effected by rhetoric or by set speeches on a patriotic note. It can only be achieved by persevering, persuasive, and sympathetic discussion, that patiently takes stock of every workman's opinion, and with homely illustration, in the vernacular of the workshop, tests it by the touchstone of economic truth.

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THE FOREIGN POLICY OF THE UNITED STATES

1. **President Wilson's Foreign Policy: Messages, Addresses, Papers.** Edited by J. B. SCOTT. Oxford University Press. New York. 1918.
2. **The President's Control of Foreign Relations.** By E. S. CORWIN. Princeton University Press. 1917.
3. **The English-Speaking Peoples: Their Future Relations and Joint International Obligations.** By G. L. BEER. New York: The Macmillan Co. 1917.
4. **The British Empire and the United States.** By W. A. DUNNING. Allen & Unwin. 1914.
5. **American Diplomacy.** By J. B. MOORE.

ILLUSIONS about America die hard; but as a rule it takes longer to kill them on this side of the Atlantic than on the other. For example, here the belief still lingers that the American Constitution, in striking contrast to our own, sprang Minerva-like from the brain of Zeus, or at least from the brains of the 'Fathers of the Constitution.' Mr Gladstone lent his great authority to this illusion. Sir Henry Maine lent his to another, which is even now by no means dissipated: 'That the 'Constitution of the United States . . . is in reality a version of 'the British Constitution as it must have presented itself to an 'observer in the second half of the last (*i.e.*, the eighteenth) 'century.'* The researches of American scholars, notably those of Mr S. G. Fisher, have effectually corrected these prevalent misapprehensions. They have shown that the American Constitution is not a copy of any 'original'; that it is pre-eminently native, and that, so far from being the result of sudden inspiration, many of its most characteristic features are as much the result of gradual evolution as the British Constitution itself.

Not less persistent is the illusion, which has prevailed in England, in regard to the foreign policy of the United States. In no respect has America been more fortunate, so it is commonly believed and affirmed, than in the lack of anything which can

* 'Popular Government,' p. 207.

properly be described as a foreign policy, and in the absence of any need for one. Even Lord Bryce, at any rate when he wrote 'The American Commonwealth,' seems to have inclined to this view. Disposed as he was to criticise with some severity the arrangements for the conduct of foreign affairs—in particular the dual control of the Secretary of State and the Senatorial Committee on Foreign Relations—he argued, in effect, that the defects of constitutional machinery do not much matter because 'America is not Europe,' and 'in foreign policy . . . the United 'States have little to do.'

That this view has never been wholly accurate is clearly shown by Professor J. B. Moore of Columbia University. He writes:—

'As conventionalised in the annual messages of Presidents to Congress, the American people are distinguished chiefly by their peaceful disposition and their freedom from territorial ambitions. Nevertheless, in spite of their quiet propensities, it has fallen to their lot, since they forcibly achieved their independence, to have had four foreign wars, three general, and one limited, and the greatest civil war in history, and to have acquired a territorial domain almost five times as great as the respectable endowment with which they began their national career.'*

The point here emphasised is one which English commentators on American politics are curiously apt to overlook. No country in the world exhibited, during the nineteenth century, a more marked tendency to territorial expansion than the United States of America. The expansion was mainly, it is true, upon American soil, and the annexations were effected for the most part by purchase or other forms of peaceful negotiation—a fact which has largely contributed to the illusion to which reference has been made. Foreign critics have been disposed—perhaps too readily—to assign such transactions to the sphere of domestic politics, and consequently to minimise the part which foreign affairs—or affairs which would be 'foreign' in any country less 'continental' in character than the United States—have played in the politics of the American people.

A cursory glance at the course of American expansion in the nineteenth century will conclusively establish the truth of this proposition. The area of the territory formally ceded by Great Britain to the United States in 1783 was about 827,844 square

* 'American Diplomacy,' p. 223.

miles. Of this considerably less than half belonged to the original thirteen colonies which occupied the narrow strip between the Atlantic and the Alleghanies. The larger half comprised the hinterland between the Alleghanies and the Mississippi, out of which were carved the States of Kentucky (admitted 1791) and Tennessee (1796), and the vast tract originally known as the North-West Territory. This territory was for many years held by the United States as 'federal domain,' but was gradually, between the years 1803 and 1858, carved up into the fully constituted States of Ohio, Indiana, Illinois, Michigan, Wisconsin, and part of Minnesota. Long before this process was accomplished the United States had taken the first of many steps on the path of territorial expansion, a step which involved the absorption of a considerable population of European origin, alien in blood and creed to the people of the original States. Planted and peopled by Frenchmen, and for more than a century one of the most cherished possessions of the French Crown, the great colony of Louisiana was handed over by France to Spain in 1763. Napoleon, intent upon reviving the Imperial glories of the old régime, recovered it in 1801; but, foreseeing that on the rupture of the Peace of Amiens, all the oversea possessions of France must fall to the mistress of the seas, he prudently pawned it to President Jefferson for $15,000,000. That he intended to redeem it on the conclusion of a general peace can hardly be doubted; but the occasion did not arise, and the United States became, by a Presidential act as bold as it was unconstitutional possessed in perpetuity of a territory which more than doubled her area. Out of this vast territory no less than twelve States were ultimately created.

To the purchase of Louisiana from Napoleon was added, in 1819, the purchase of Florida from Spain. The next two acquisitions belong to a somewhat different category, and ultimately involved the United States in hostilities which American historians betray no eagerness to justify. Texas was originally part of the empire of Mexico, but in the third and fourth decades of the century it received a steady stream of immigrants from the United States; in 1833 it proclaimed its independence of Mexico, and shortly afterwards began to negotiate for admission to the Union. The slave-States of the South were by this time beginning to discover that slave-culture, particularly the culture of tobacco, was peculiarly exhausting to the soil, and they

clearly foresaw that, from economic causes alone, slavery itself was doomed to gradual extinction unless the slave-owners could acquire virgin land apt for the production of those crops, notably cotton and tobacco, to which their slaves were accustomed, and which yielded a profitable return to slave-labour. Hence the anxiety of the South for the admission of Texas; and hence, also, the opposition of the North.

The South prevailed. Texas was formally admitted in 1845, and the United States thus annexed a territory more than four times as large as England and Wales. But the annexation of Texas had even larger consequences. An acrimonious dispute as to the definition of the boundaries of the new State arose between its old masters and its new, with the result that Mexico was goaded into war, and President Polk had the satisfaction of bringing under the Stars and Stripes the 'First Mexican Cession,' a territory nearly as large as France, Spain, and Germany combined, containg 591,318 square miles, and including the coveted auriferous soil of California. To this consummation another factor powerfully contributed. In Texas, Great Britain could claim no direct interest; but, partly from her strong conviction as to the immorality of slavery, she had disapproved of its annexation to the United States. In California, Great Britain might feel a more material interest. Were its coasts not lapped by the waves ruled by Britannia? Was not San Francisco a promising harbour for the reception of the Pacific squadron? Was not California contiguous to the Oregon territory, which had long been a subject of dispute between the two Governments? The Rush-Bagot Convention of 1818 deliberately postponed a settlement of this thorny question by a timid provision that the whole region, 'so far as claimed by either Great Britain or the 'United States, should for ten years be free and open to the 'vessels, citizens, and subjects of the two Powers.' A settlement was again postponed in the Conventions concluded in 1828, but the difficulty was at last composed in June 1846, and the boundary between British North America and the United States was defined from ocean to ocean. Canada secured Vancouver Island and the navigation of the Columbia river; the United States acquired a large territory which is now represented by the States of Oregon, Washington, and Idaho.

One other big deal, but one only, remains to be recorded. Thus far the advance of the United States from ocean to ocean

had been territorially continuous; each westward step was a natural sequel, if not a necessary consequence, of the previous one. The progress made was therefore the less noticeable, if not less substantial. The considerations involved seemed to belong rather to the domain of domestic than to that of foreign policy. The purchase of the Alaskan territory in 1867 from Russia was a more obvious demonstration of an imperialistic temper. Moreover, the fact that the newly acquired territory was separated from the United States by British North America, and that it brought the States into close contact with Asiatic Russia might have seemed likely to involve America much more closely than heretofore in the politics of the old world. As a fact, the Alaska purchase led to a series of boundary disputes between Great Britain and the United States, which were not finally composed until the conclusion of the Arbitration Treaty of 1903. Nor is Canada even yet reconciled to the concessions then made to the American claims by Lord Alverstone. Alaska added more than 500,000 square miles to American territory.

This summary will at least suffice to show that the American record of expansion does not fall behind that of the principal European Powers in the nineteenth century. In less than a hundred years after the recognition of independence the United States was more than quadrupled in size. As Professor Ramsay Muir truly says:—

'The Imperialist spirit was working as powerfully in the democratic communities of the New World as in the monarchies of Europe. Not content with the possession of vast and almost unpeopled areas, they had spread their dominion from ocean to ocean, and built up an empire less extensive indeed than that of Russia, but even more compact, far richer in resources, and far better suited to be the home of a highly civilised people.'

Thus far attention has been concentrated upon one aspect of American foreign policy; the rapid territorial expansion upon the north American Continent. It is a remarkable fact that this westward advance was achieved almost without bloodshed. Yet it must not be forgotten that the advance was largely, though indirectly, responsible for the Civil War. That war might never have occurred had the United States been strictly limited to their original territory; had there been no opportunity of expansion. Otherwise, the only bloodshed

directly traceable to the movement was the Mexican War of 1846. Frequently, not to say continuously, were the relations between the United States and Great Britain severely strained, but the strain was due to causes only remotely connected with this development, and after 1814 the peace was never broken.

To this single breach of the peace between the two great English-speaking nations it is now necessary briefly to refer. That breach was almost accidental, and ought to have been avoided, yet the underlying causes, apart from the immediate occasion of the war of 1812, afford an apt illustration of the peculiar genius of American foreign policy. In American policy as in the American character a foreigner seems to detect a curious but striking blend of high idealism and shrewd practicality. The Declaration of Independence is pervaded by both qualities. On the one hand, the preamble is redolent of the abstract philosophy of Rousseau, and anticipates the language of the French Declaration of the Rights of Man; on the other, the laborious enumeration of grievances recalls the English Bill of Rights. Similarly in regard to foreign relations. The outbreak of war between the French Republic and Great Britain in 1793 seemed to offer to the young Republic of the West an opportunity of repaying some portion of the debt which, undoubtedly, it owed to France. The United States was moreover specifically pledged by treaty to defend the French possessions in America. In 1793 a French plenipotentiary, Edmond Genest, arrived in America to claim the fulfilment of the pledge. So outrageous however was the envoy's behaviour that in 1794 Washington demanded his recall. Meanwhile, the American President had issued (22nd April 1793) a declaration of neutrality. That declaration caused hardly more disappointment in France than in America, and chiefly served to stimulate the growing hostility against Great Britain. Supremely anxious to avoid a breach of neutrality Washington then dispatched Chief Justice Jay to London, and through his good offices a treaty of amity and commerce was concluded between the two countries in November 1794. The Jay Treaty guaranteed the neutrality of the States, it adjusted some minor grievances on both sides, but, to the bitter chagrin of the Americans, it failed to touch any of the larger questions at issue between England and America: the right of search and the right of impressment, or the vexed

question of paper blockades. Consequently, though Great Britain agreed to surrender the forts she still held on the Canadian frontiers, and to compensate American merchants for the damages they had suffered under the Order in Council of November 1793, the Treaty did little to appease the feelings of the anti-British party in the States.

Two years later George Washington bade farewell to office, and on doing so took the opportunity to lay down with precision the lines of the policy which he desired his countrymen to pursue :—

'The great rule of conduct for us in regard to foreign Nations is, in extending our commercial relations, to have with them as little *Political* connection as possible. . . . Europe has a set of primary interests which to us have none, or a very remote relation. Hence she must be engaged in frequent controversies, the causes of which are essentially foreign to our concerns. Hence, therefore, it must be unwise in us to implicate ourselves, by artificial ties, in the ordinary vicissitudes of her politics, or the ordinary combinations and collisions of her friendships or enmities. Our detached and distant situation invites and enables us to pursue a different course. . . . Why forego the advantages of so peculiar a situation? Why quit our own to stand upon foreign ground? Why, by interweaving our destiny with that of any part of Europe, entangle our peace and prosperity in the toils of European ambition, rivalship, interest, humour, or caprice? It is our true policy to steer clear of permanent alliances with any portion of the foreign world.'

Washington, it will be observed, drew a sharp distinction between the 'extension of commerce' and implication in the 'ordinary vicissitudes of European politics.' But at such a moment in world-history it was not easy to maintain the distinction or to avoid implication. The continued neutrality of the United States was bitterly resented by France, and the terms of the Jay Treaty were the object of severe and even vituperative criticism. Special envoys were sent from America to France to smooth over the difficulties, but the insulting treatment accorded to them by the Directory brought the two countries to the brink of war. Washington was summoned from his retirement to take command of a provisional army; a Navy Department was hastily organised; and in 1798 American squadrons captured several French ships in the West Indies. Serious developments were however avoided by the overthrow of the Directory and Napoleon's advent to power, and under

the Consulate friendly relations between the United States and France were quickly restored.

On his accession to office in 1801 Jefferson reaffirmed in phrase even more trenchant, the maxims first enunciated by Washington :—

'Peace, commerce and honest friendship with all nations, entangling alliances with none.'

About the same time the new President wrote to his friend, Tom Paine :—

'We shall avoid implicating ourselves with the Powers of Europe, even in support of principles which we mean to pursue. They have so many other interests different from ours that we must avoid being entangled in them.'

Seven years later Jefferson insisted that the supreme object of the policy of the United States 'must be to exclude all 'European influence from this hemisphere.' It was easier to enunciate the principles of non-intervention and American isolation than in practice to maintain the corresponding policy. In 1806 the Jay Treaty expired, and all attempts to find a new basis of agreement between Great Britain and America proved unavailing. It would, indeed, have been marvellous had the attempts been successful, for the attitudes of England and America on an issue vital to both, were irreconcilably opposed. As an attractive phrase the 'freedom of the seas' appealed, as it always has, to American idealism, while a shrewd business instinct rendered the Americans reluctant to abandon, at the bidding of the dominant maritime and commercial Power, a carrying trade which was becoming increasingly lucrative. Great Britain on the contrary, engaged in a contest *à outrance* with Napoleon, was driven to enforce with increasing rigour those principles of maritime law to which she had long in theory adhered.

By an Order in Council of 1794 Great Britain prohibited direct trade between France and her colonies; in 1798 she issued a similar injunction in regard to trade between France, Holland and Spain and their colonies. These orders cleared the ocean of enemy shipping, but in the earlier and less rigorous phases of the war they were worked to the advantage of neutrals. By the adoption of the device of 'transhipment,' or breaking bulk, the United States and other neutrals were able to transfer

much of the trade of belligerents to themselves. In order to put a stop to the practice on the part of the Scandinavian States, whose ships from the French or Spanish West Indies were in the habit of landing goods at French or Dutch ports as they passed, the British Government in 1799 declared the Dutch Coast under blockade. This did little to deter American captains, who shipped their cargoes in the West Indies, ran into Charlestown, obtained a clearance for their goods in an American port and carried the colonial cargo to Europe, secure from any interference from British ships. In time, however, this colourable process was interrupted by a decision of the English Court of Admiralty which declared such voyages to be in effect 'continuous.' To evade this decision the Americans then adopted the practice of actually landing their cargoes at an American port and transhipping them, and after further litigation the English courts accepted the principle that transhipment 'broke' the voyage and legalised the traffic.

The causes of friction were not however removed, and after the rupture of the Peace of Amiens and the renewal of the war, fresh difficulties arose. Great Britain, relying almost entirely upon her sea power and her commerce to sustain the anti-Napoleonic coalition, saw her naval arm withered and her commerce destroyed by the legal ingenuity of the Americans. The result soon became apparent to the world. To quote the words of an American historian :—

> 'In two years' time almost the whole carrying trade of Europe was in American hands. The merchant flag of every belligerent save Great Britain almost disappeared from the sea. France and Holland ceased to trade under their own flags. Spain for a time carried her specie and her bullion in her own ships, protected by her men-of-war; but this practice was soon abandoned, and before 1806 the dollars of Mexico were brought to her shores in American vessels. It was under the Stars and Stripes that the gum trade went on with Senegal, the ingots and dollars were exported from Vera Cruz and La Plata, that hides were carried from South America, and sugar from the ports of Cuba. From Cadiz, from Barcelona, from Lisbon, from Emden and Hamburg, Gotenburg and Copenhagen, from the ports of Cayenne and Dutch Guiana, from Batavia and Manila, fleets of American merchantmen sailed to the United States, there to break the voyage and then go on to Europe.'

Great Britain retaliated by declaring a series of 'paper' blockades, and by refusing to recognise a 'break' of voyage which was merely colourable. Thereupon the American Con-

gress passed a Non-importation Act, which, however, remained in force only a few weeks. Nerves on both sides were further strained by the rigorous insistence upon the 'right of search' not only for goods but for men, and by the impressment of American subjects sailing aboard American ships. Over 1000 cases of wrongful impressment were subsequently admitted by the British Government as having occurred between 1803 and 1810. But the fundamental cause of the war of 1812 was the almost insoluble crux of neutral trade. The struggle between Great Britain and Napoleon was then approaching its climax. Nelson's victory at Trafalgar was followed up by an Order in Council (May 1806) which placed the whole coast of Europe from the river Elbe to Brest under blockade. Napoleon retaliated with his Berlin Decree (November 21). Great Britain replied with new Orders in Council (January 7 and November 11, 1807); Napoleon issued his Milan Decree in December, and neutrals, warned off by the British Navy from every port from which the British merchant flag was excluded, subject to confiscation by Napoleon if they submitted to the right of search, found themselves in literal truth between the deep sea and the devil.

During the next few years the relations between Great Britain and the United States became steadily worse. If the Orders in Council pressed more hardly upon Americans than did the Decrees successively issued by Napoleon it was partly because England was in a position to enforce her orders while Napoleon was not, and partly because Napoleon was more ingenious in making a virtue of his impotence. As a result, the two English-speaking peoples drifted into the war of 1812. The details of that war are as foreign to the purpose of this paper as the causes of it are pertinent; but this much may be said. To England it was almost a negligible though none the less a regrettable incident in a titanic struggle. To American minds it loomed much larger at the time, and it left very bitter memories behind.

Nevertheless, despite frequent disputes as to the delimitation of boundaries, as to disarmament on the Canadian frontiers and as to fisheries; despite many acute misunderstandings; despite the proverbial difficulty of keeping the peace between kinsmen; despite the specific difficulties which arose in the War of Secession—the recognition of the belligerency of the South, the blockade running, the affair of the *Trent* and that of the *Alabama*; despite many other issues that might have led to

war; peace was preserved between Great Britain and the United States during the whole course of a complete century from the conclusion of the Treaty of Ghent in 1814. In the summer of 1914 preparations were well advanced for 'an adequate and 'dignified celebration of the impressive fact that for one hundred 'years the English-speaking peoples throughout the world have 'been at peace with one another.' Of those preparations the only visible memorial is the singularly interesting volume from the preface to which these words are quoted.* That hundred years' peace, as Dr. Nicholas Murray Butler has justly said :—

'Is of itself an eloquent testimony to the temper and self-restraint of the English-speaking peoples, and a noble tribute to the statesmen who have in succession guided their policies and conducted their international business. The long invisible line which separates the United States and the Dominion of Canada has been left unguarded despite the fact that two energetic, rapidly-expanding peoples have been pushing steadily westward on either side of it. This long invisible, unguarded line is the most convincing testimony that the world has to offer to the ability of modern self-disciplined peoples to keep the peace.'

The peace thus kept forms no inconsiderable part, and not the least honourable part of the foreign policy now under review. It is not, however, the most conspicuous. Literary research would seem to establish the conclusion that American foreign policy during the last century was concentrated upon a single episode or rather upon a single doctrine. 'The Monroe Doctrine,' writes Professor McLaughlin, 'is practically the only 'policy which we have evolved — our one tradition.' 'The 'Monroe Doctrine,' writes Mr. Kennedy, 'is to the American 'voter what the maintenance of a big fleet . . . is to the British 'elector' ('The Pan-Angles,' p. 126). 'For two full generations 'this (the Monroe Doctrine) continued to be the norm of conduct' (G. L. Beer, *op. cit.*, p. 77). The truth of these judgments has been recently and remarkably exemplified by the debates in the American Congress and the American press on the policy of President Wilson and the project of a League of Nations. With the merits of President Wilson's policy this article is not concerned. What is remarkable is that the touchstone applied

* 'The British Empire and the United States:' A Review of their Relations during the Century of Peace following the Treaty of Ghent. By W. A. Dunning, with a preface by Nicholas Murray Butler.

to that policy by a large proportion of American critics is whether it does or does not conform to the principles of the Monroe Doctrine and to 'our one tradition'—to the 'norm of 'conduct' for foreign affairs at Washington.

The genesis of that famous doctrine has been the subject of considerable dispute. The theory contains in its complete form two distinct formulas, first, abstention on the part of America from any intervention in European affairs, and secondly, the exclusion of European influence from the American continent. The first formula was explicitly affirmed, as we have seen, by Washington in his Farewell Address, and by Jefferson in his first Inaugural. It was not long before the second and strictly correlative formula was added to it. As early as the year 1808 Jefferson insisted that the object of the United States should be 'to exclude all European influence from this hemisphere,' and three years before President Monroe sent his famous message to Congress, Jefferson was at pains to emphasise 'the advantages 'of a cordial fraternisation among all the American nations, and 'the importance of their coalescing in an American system of 'policy totally independent of and unconnected with that of 'Europe.'

Jefferson's words date from 1820, but for some years past the tendency of American opinion in this direction had been clearly perceived by the more acute among European diplomatists. Thus in 1814, at the time when peace negotiations were in progress between Great Britain and the United States, Pozzo di Borgo, the Russian Ambassador in Paris, wrote to Count Nesselrode:—

'The conclusion of this important matter is uncertain. The dominant party in America, which desired the war, is aiming at the destruction of all European interests in the American continent. . . . Will the fact that Great Britain has a free hand stop this plan? I said all this in England, which takes short views, but was not believed.'*

It would be interesting to know whether Pozzo di Borgo's warning ever reached the ears of Canning. Without this information, it is idle to speculate whether the warning would have influenced Canning's policy in 1823. In that policy there were several factors: a desire to 'redress the balance of the old 'world,' and, in particular, to 'get even' with the Holy Alliance;

* Quoted by W. Alison Phillips, 'The Confederation of Europe,' p. 90.

a desire to prevent France from extending her intervention from the old Spain to the new; a desire to protect the commercial interests of Great Britain in the Spanish Indies, interests which were gravely menaced by the inability of Spain to reduce to obedience her colonial subjects, combined with a refusal to recognise their independence; and, finally, a willingness to hold out an encouraging hand to young States struggling to be free. On 20th August 1823, Canning conveyed to Richard Rush, the American Minister in London, a clear intimation as to the attitude of Great Britain in reference to the Spanish colonies, and at the same time suggested that she should come to an understanding on the subject with the United States. President Monroe inclined towards the acceptance of Canning's suggestion, and was strongly supported in his view both by Jefferson and by Madison. By accepting Great Britain's offer of co-operation, wrote Jefferson, the United States would 'detach her from the bonds of (the 'European despots), bring her mighty weight into the scale of 'free government, and emancipate a continent at one stroke.' * Madison cordially concurred in Jefferson's view.

The Secretary of State, John Quincy Adams, was, on the contrary, strongly opposed to co-operation with Great Britain. He suspected that Canning was less anxious to emancipate South America than to thwart the ambition of France, and he urged upon the President that it was more consonant with the traditions of American policy that, while pursuing up to a point a common end, she should seek to attain it by her own isolated and independent action.†

The advice of Adams prevailed, and the famous message sent to Congress on 2nd December 1823, in the name of President Monroe, embodied his views, if it did not actually re-echo his language. The significance which has ever since been attached to that message may justify quotation of the pertinent passages. They run as follows:—

'. . . The occasion has been judged proper for asserting, as a principle in which the rights and interests of the United States are involved, that the American continents, by the free and independent condition which they have assumed and maintain, are henceforth not to be considered as subjects for any future colonisation by any European Powers. . . . We owe it, therefore, to candour and to the amicable relations existing between the United States and those Powers, to declare that we should

* Jefferson, 'Complete Works,' vii., p. 315.
† Cf. 'Memoirs of J. Q. Adams,' vi., pp. 185, 194, 226.

consider any attempt on their part to extend their system to any portion of this hemisphere as dangerous to our peace and safety. With the existing colonies or dependencies of any European Power we have not interfered, and shall not interfere. But with the Governments who have declared their independence and maintained it, and whose independence we have, on great consideration and on just principles, acknowledged, we could not view any interposition for the purpose of oppressing them, or controlling in any other manner their destiny, by any other European Power, in any other light than as the manifestation of an unfriendly disposition towards the United States. . . .

'Our policy in regard to Europe . . . is, not to interfere in the internal concerns of any of its Powers; to consider the government *de facto* as the legitimate government for us; to cultivate friendly relations with it, and to preserve those relations by a frank, firm, and manly policy, meeting in all instances the just claims of every Power, submitting to injuries from none.'

By this message Canning was gravely perturbed. He had got much more than he bargained for. All that he desired was the co-operation of the United States in thwarting the supposed designs of the Holy Alliance, and in particular of France, upon the Spanish colonies. What he got was a general intimation, *urbi et orbi*, that henceforward the American continent would be the exclusive preserve of the American peoples, and that no further acquisitions of American soil would be permitted to European or other States.

From December 1823 to December 1918 the Monroe Doctrine has been the sheet-anchor of American diplomacy.* Primarily put forward in reference to the Russian claims upon the North-West coast and to the crisis in Spanish South America, the principles enunciated by President Monroe were, from the first, perceived to possess a far wider application. Canning's chagrin was amply justified. The message no more discriminated between Great Britain and the absolutist Powers of the Continent than did the propagandist Decrees issued by

* The literature on the subject has now swollen to immense proportions. Perhaps the most scholarly monograph will be found in articles on 'J. Q. Adams and the Monroe Doctrine,' contributed by Washington C. Ford to the *American Historical Review*, Vols. vii. and viii. Reference may also be made to J. H. Latané, 'The United States and Spanish America'; R. B. Merriman, 'The Monroe Doctrine'; A. B. Hart, 'The Monroe Doctrine': C. H. Sherrill, 'Modernizing the Monroe Doctrine'; W. F. Reddaway, 'The Monroe Doctrine'; G. F. Tucker, 'The Monroe Doctrine'; H. Bingham, 'The Monroe Doctrine, an Obsolete Shibboleth,' etc.

the French Republic in the autumn of 1792. It was, in fact, as Professor Dunning has candidly admitted, 'the pronouncement of a great democracy just arrived at aggressive self-consciousness. Its underlying spirit was in very truth antagonism, so far as concerned affairs of the Western hemisphere, to 'all monarchic Europe, Great Britain included.'*

During the seventy years following 1823 comparatively little was heard of the Monroe Doctrine. The United States had other things to think about, notably the problem of national unity, forced to the front by the rapidity of the westward expansion. Still, whenever opportunity offered, the world was reminded that the Doctrine, though slumbering, retained its vitality. President Grant, in particular, asserted it with vigour. Thus, in reference to the temporary occupation of San Domingo by the Spaniards (1861-1865), he declared that 'no 'European Power can acquire by any means—war, colonisation, 'or annexation—even when the annexed people demands it, any 'portion of American territory,' and ventured to predict that 'the time is not far distant when, in the natural course of events, 'the European political connection with this continent will 'cease.'†

In the last decade of the nineteenth century the Monroe Doctrine was invoked in a case of serious importance. For many years there had been disputes between Great Britain and Venezuela as to the boundaries between the latter State and British Guiana. Lord Aberdeen had tried to settle the matter in 1844, but his suggestions were declined. Thirty years later Venezuela professed its willingness to accept the Aberdeen line, but Lord Granville and his successors refused to concede it. Venezuela represented the British contention as being tantamount to an attempt at annexation, and, invoking the Monroe Doctrine, appealed to the United States. The dispute dragged on until, in July 1895, Mr. Olney, Secretary of State under President Cleveland, insistently demanded that Great Britain should submit the whole question to arbitration, and incidentally reasserted in the most extreme form the underlying principles of the Monroe Doctrine.

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* *Op. cit.*, p. 54.
† Merriman, *op. cit.*, p. 4.

'That distance and three thousand miles of intervening ocean make any permanent political union between a European and an American State unnatural and inexpedient, will hardly be denied. . . . The States of America, South as well as North, by geographical proximity, by natural sympathy, by similarity of governmental constitutions, are friends and allies, commercially and politically, of the United States. . . . To-day the United States is practically sovereign on this continent, and its fiat is law upon the subjects to which it confines its interposition. . . . There is, then, a doctrine of American public law, well founded in principle and abundantly sanctioned by precedent, which entitles and requires the United States to treat as an injury to itself the forcible assumption by a European Power of political control over an American State.'

That Mr. Olney's dispatch gave a wide extension to the principles laid down by President Monroe will hardly be denied, nor that it was needlessly provocative in tone; but Lord Salisbury declined to be provoked. He did, indeed, refuse to accept 'unrestricted' arbitration, and politely questioned the applicability of the Monroe Doctrine to the matter in hand. It was, however, manifest from his reply that he had no intention of allowing Great Britain to be drawn into a serious quarrel with the United States. Lord Salisbury's good humour tended rather to provoke than to appease the wrath of the United States, and on 17th December 1895 President Cleveland sent a special message to Congress, wherein he declared that

'. . . If a European Power, by an extension of its boundaries, takes possession of the territory of one of our neighbouring Republics against its will, and in derogation of its rights, it is difficult to see why, to that extent, such European Power does not thereby attempt to extend its system of government to that portion of this continent which is thus taken. This is the precise action which President Monroe declared to be dangerous to our peace and safety.'

This message, notwithstanding its decorous moderation of language, accentuated a difficult situation, and feeling began to run very high in America. 'Fortunately for us,' writes an American critic, 'Lord Salisbury had a very good sense of 'humour, and declined to take the matter too seriously.'*

Both Great Britain and Venezuela agreed to submit the evidence for their conflicting claims to a 'committee of investigation' appointed by the United States; and the investigation issued in a Treaty of Arbitration, concluded nominally between

* Bingham, *op. cit.*, p. 12.

the immediate disputants, but in reality between Great Britain and the United States. The result of the arbitration was, on the whole, to substantiate the British claim. A still more important result ensued. In January 1897 a General Arbitration Treaty between the two great English-speaking nations was signed by Sir Julian Pauncefote and Secretary Olney. The Senate, however, refused its assent, and the Treaty was not actually concluded until the autumn of 1914.

In the interval a very significant change had taken place in the attitude of the United States towards world politics. The Venezuelan affair proved to be the starting-point for a new departure in American diplomacy. From the position then asserted by Mr. Olney his countrymen could not well recede. That position involved moreover important corollaries. If the United States is 'practically sovereign' on the American continent, if 'its fiat is law,' it could not avoid responsibility for the doings of its neighbours. Several of those neighbours have shown themselves both weak and turbulent, and in 1904 President Roosevelt frankly admitted that 'the adherence of 'the United States to the Monroe Doctrine may force the United 'States, however reluctantly, in flagrant cases of wrongdoing or 'impotence to the exercise of an international police power.'

As a fact, the policy of isolation had already been abandoned. The war with Spain in 1898 was followed by the definite assumption of responsibilities in the Caribbean and in the Pacific. The annexation of the Hawaiian Islands (1898), the partition of Samoa (1899), and still more the conquest of the Philippines, unmistakably proclaimed the advent of a new world power. The *Zeit-Geist* had proved itself too strong even for the Americans. As President McKinley wrote in 1898:—

> 'The march of events rules and over-rules human action . . . the war has brought us new duties and responsibilities which we must meet and discharge as becomes a great nation, on whose growth and career from the beginning the Ruler of Nations has plainly written the high command and pledge of civilisation.'

The United States afforded a further indication of its new position in world politics by taking part, in 1900, with the leading European Powers in the relief of Pekin and the punishment of the Boxers.

But all these manifestations of the new spirit, with others too numerous to recall, pale into insignificance as compared with the

great resolution taken in 1917. Few will question the accuracy of Lord Bryce's words uttered in 1917:—'With the entrance of 'the United States into this war a new chapter opened in world 'history. It was an occasion of solemn significance for all the 'ages to come.' To this judgment one observation may, however, be added. The new chapter is one towards the opening of which events have been tending with some rapidity since 1898, if not since 1895. The resolution to which President Wilson brought his country in 1917, though far transcending in significance any previous resolution in regard to external affairs, was in harmony with the whole trend of American policy for the last twenty years. Still more important: it was in harmony with the development of *Welt-politik*. During the last generation the world has become one in a sense of which no one dreamed forty years ago. 'The expansion of Europe' is the formula in which a brilliant historian has recently crystallised the political developments of the last half-century. The formula expresses the truth, but not quite the whole truth. If Europe has expanded, the world has shrunk; and, in the process of contraction, the American, Australian, and African continents have been inevitably drawn into the maelstrom of European politics.

J. A. R. Marriott.

TROPICAL AFRICA

THERE is no necessity to demonstrate that the produce of the tropics is indispensable to the civilised nations of the world, and that we can neither stand aloof and allow these regions to remain undeveloped, nor expect them to be developed unaided by the races which inhabit them. The produce of the tropics enters into the very essentials of our modern life. The edible fats, which the war has taught us to call by their proper names, largely supplement the inadequate output of the dairy. The machinery of our workshops, the lubrication of our railway trucks, even the rolling of the tinplate from which, in time of peace, we made our biscuit boxes or roofed our sheds, and which, in time of war, rendered possible the distribution of 'canned' food to our troops, is largely dependent on palm oil. Cotton (a sub-tropical product) and glycerine, indispensable at all times, were essential to victory. The uses of rubber, from the mackintosh to the bicycle tyre, are innumerable. Of tea, coffee, sugar, tobacco, hard woods, fibres, dyes, paper material, rice, silk, hides, and many minerals, the uses are obvious; but there are many other materials of tropical origin which enter into commercial production, and only the experts know how absolutely essential they are.

Moreover, our dependence upon the tropics is increasing, as can be seen by comparing the list of tropical imports and their values given by Mr. Kidd twenty years ago with the values imported by the nations of the temperate zone to-day. In 1917 Nigeria alone exported £8,500,000 of produce.

Herr Zimmermann, whose reputation as an economist and traveller in the tropics makes it worth while to cite his opinion, asserts in a brochure written last year that without control of tropical regions Germany must become a second or third rate Power. His opinion has the support of a number of eminent German publicists quoted by his translator. He produces statistics to prove that the rapid rise of Germany to wealth and power was due to her deliberate policy of transferring to the cheaper soils of the tropics the cultivation of as much raw

material as possible, while devoting her home energies to the production of foodstuffs. But German agriculture and industry wholly depended, he says, on the supply of cheap raw materials (chiefly tropical) obtained through the 'open door' which England offered. 'We climbed by England's policy of the open 'door. She is going to correct that mistake. . . . The future 'policy of the world must be envisaged by reference to the great 'tropical countries which provide the food supply for the great 'masses of the people.' All that is necessary in his opinion to convert his country 'at one stroke to the Germany of 1880,' is that England should impose an export duty on her tropical raw materials and foodstuffs.* He ascribes the war to the rivalry for control of the tropics, and considers their acquisition of greater value than extension in Europe.

We have, in fact, reached our existing economic organisation by the aid of the tropics, and can only maintain it by the development of their resources. Nor in such circumstances can we admit that the native inhabitants have the right to prevent development or to allow the essential products of those regions to run to waste. It follows that the nations to whom that control of the tropics is entrusted must regard themselves as trustees, not only for the well-being of the natives, but also for the needs of the civilised world in the matter of tropical produce.

The soundness of this conception is well demonstrated in Mr. Kidd's essay on the relation of the tropics—their resources and their government—to modern civilisation, an essay perhaps the most suggestive and the most inspiring to the tropical administrator which the English language contains in so brief a compass. Mr. Kidd goes so far as to assert that, viewed from this standpoint, no less than from the standpoint of the welfare of the millions who inhabit these regions, the control of the tropics transcends in importance the reconstruction of the map of Europe and the fate of its thrones and dynasties.

The problem then which confronts the world in regard to the tropics is twofold: the conditions under which their essential

* How completely the use of the 'economic weapon' may supersede the necessity for the armies of the League of Nations can well be realised by those who have witnessed, as I have, its effective use by an unarmed China against America, Japan, and the most powerful of British firms.

produce shall be available to civilised nations, and the welfare of the native inhabitants. The principles which govern both are complementary to each other. They form a basis upon which the administrator and the merchant can co-operate. The workshops of Europe and America can cheaply produce the textiles and hardware which add to the comfort and raise the standard of life of the native in exchange for his raw materials and foodstuffs. The profit on the exchange is so large to both parties that the administrator finds no difficulty in raising a revenue to promote education and good government, and to facilitate development.

As regards the first issue. England has for three generations stood for the policy of the open door, and her success has been largely due to that policy. She has thus recognised her trusteeship to civilisation as well as towards the native races. To impose tariffs for the exclusive benefit of the controlling Power is, as Mr. Kidd observes (p. 40), merely a return in a modified form of the old plantation system. Tariffs may, of course, be imposed for the purpose of raising colonial revenue. It would also be conceivably justifiable to impose special tariffs in order to check the too rapid expansion of Germany, but in that case it must be recognised that the revenue which accrues belongs to the colony and not to the controlling Power, and precautions must be taken to secure the Colony from economic loss.

This issue is raised in another form by proposals to exploit the tropics in order to pay off part of the war debt, which have recently been made by the Empire Resources Development Committee. Setting aside the question whether the British exchequer can at this time afford to embark great sums in enterprises which, however promising, will need time before they can yield a dividend, and which are already well assured of attention by private enterprise, these proposals are the negation of the principle of trusteeship. They involve the grant of exclusive privileges and concessions to the controlling Power, and the diversion to it of profits which should accrue to private enterprise—yielding its quota to the State. It is more in consonance with the spirit and tradition of British colonial policy that the functions of the Controlling Power should be confined to creating conditions favourable for the work of the merchant and capitalist. The tropical possessions, which owe their freedom to the British navy and army and the vast war expenditure of

England, undoubtedly ought to bear a reasonable share of the debt that has been incurred, but it is far better that they should be left to undertake that responsibility of their own free will than that their resources should be exploited by a reversal of the principles of which England has been the foremost champion.

The tropical colonies have not proved ungrateful. They have vied with each other to accept their share of the burden of the Great War to the limit of their resources. I can speak for Nigeria. Her soldiers, black and white, and her transport carriers have laid down their lives by hundreds in the Cameroons and in East Africa, and were on the point of embarking for Palestine when hostilities ceased. A third of her civil staff has been withdrawn, and the remainder have worked double tides to carry on. Her projects of development have been arrested. She has borne war costs aggregating nearly a million sterling, and has set the example of assuming as her own a portion of the Imperial War Debt (£6,000,000). Her purely native administrations have offered £50,000 a year, and she has contributed to war charities by private and generous donations. This is the better way.

America, as I shall presently recall, was (with Great Britain) the first to recognise the principles of guardianship of the native races, but I venture to think that (except in the Philippines) her very excess of zeal and good intention has resulted in failure in her trusteeship both to civilisation and to the native races. In Hayti and the South American 'republics' revolution, military dictatorships, anarchy, and bankruptcy are the chronic conditions. They are due to the absence of any guidance or control by nations more advanced in social organisation, and to the presence of a naturalised European clique cut off from contact with their own people and from the influence of European public opinion. While refraining from exercising control herself, America, by her 'Monroe Doctrine,' has deprived these peoples of other assistance. As a result, civilisation has gained but an infinitesimal benefit from the resources of these lands—perhaps the richest in the world—while their peoples have gone backward and not forward. Nor has the advent of financiers and concession-hunters, or even of the best type of company-promoter, been able to arrest the decay, owing to the corruption of the local governments. Liberia is in the same category, but the Philippines form a notable contrast.

Germany, on the other hand, according to the latest exponents of her colonial policy, frankly adopts the system of tariffs and preferences in its extremest form. 'Mittel-Africa' is to give preference to German imports, and tax all others. All raw materials and foodstuffs are to go to Germany as the basis of a new economic system.

Let us turn to the second and more interesting question—the welfare of the native races. Familiar as readers of the EDINBURGH are with Adam Smith's description of the plantation system, it may be interesting to recall here very briefly the evolution of the notable advance that has since been made.

The motive which in the sixteenth, seventeenth, and eighteenth centuries inspired the invasion of the tropics by England, Holland, Spain, Portugal, and France was solely that of gain to the victor. The natives were regarded merely as instruments to make profit for Europeans. In those regions where they died out, or were insufficient in numbers for the purpose, they were replaced by imported slaves. Gradually, the conscience of the Anglo-Saxon races was awakened to the moral turpitude of this policy. That vital spark was lit which was in the future to illumine their dealings with the backward races. Under its influence the overseas slave trade disappeared, and the slaves in the British Settlements and the United States were emancipated. This moral revolution had its origin in the conception of the equality of man, based on religious sanctions.

Uninformed by experience, the reformers fell into the error that the tropical races, given control of their own destinies, would grow into modern States with stable governments, and develop their own resources. How deplorable were the results of the inaction of America we have already seen. They were only less so in the British Colonies because withdrawal, though contemplated, was not actually effected; but the prosperity which had marked the era of plantations—however immoral its basis—gave place to decadence and almost to ruin. Great Britain was the first to recognise that, in the words of Mr. Kidd, 'there never has been, and there never will be good 'government by natives' of the tropics; that they need the sympathetic control and guidance of nations of the temperate zones, not necessarily more intellectually brilliant, but more capable of social organisation than themselves; and that the nation which assumes this position must act as trustee on

their behalf. India and Egypt afford notable examples in illustration of the truth of this view.

The old idea that tropical races in an early stage of evolution could very soon, or at most within a few generations or decades, govern themselves died hard. It is perhaps hardly fully realised even yet by our statesmen. American administrators soon realised it in the Philippines, but their home government was loth to admit the fact.

The new principle of trusteeship, though not universally accepted—especially by Holland—had its influence upon all the possessors of tropical regions in their dealings with the subject races, except with Germany—the latest Power to assume control in the tropics. Herr Zimmermann tears off the veneer with which Germany had thought well to clothe her methods before the eyes of Europe. He frankly states that the Germans brought 'much distress' to the natives, and that the mortality among the gangs of forced labourers was very high. As a traveller who had himself visited the German Colonies, he thus describes the results (p. 43):—

> 'Up to now our system of plantations and our railway construction have caused great upheavals among the black populations, have upset ancient social customs, uprooted in part a new generation, and depopulated whole districts. . . . It was noted quite accurately that, in general, the changes brought little blessings to the people . . . the labourer on a railway or a plantation took little back with him to his native village, after long labour, but a few gaudy rags and diseases.'

Yet he and the other German publicists who advocated the creation of a German 'Mittel-Africa,' which should include the Congo State, French Equatorial Africa, and German Kamerun, and East Africa, condemn as over-indulgent the methods of German rule in the past, which Zimmermann has thus described, and pour contempt on the 'spoiling of the natives' and the 'false humanitarianism,' which they say characterises British rule. He entertains no delusion as to the effect of German rule upon the subject races: 'There is (he continues) no doubt that 'all these evils will be multiplied as soon as a greater number 'of white settlers come into the country. There is no help for 'it. Mittel-Africa too must go into the melting-pot.'

His proposal is that the oil-palm districts (which constitute the bulk of the equatorial belt) are to be the property of the German State, and are to be leased to Germans. Thirty million

negroes are to work for the benefit of 100,000 German settlers, concessionaries, and officials, and through them for the enrichment of the people of Germany. The settlers are to be given holdings from native lands. He condemns the policy of cultivation on their own lands by natives, and prefers plantations owned by Germans and worked on their behalf by negroes, but adds that there is no need to do away entirely with cultivation by natives! The object, he declares, is to create a white agricultural population, for he considers the theory that Europeans cannot colonise the tropics to be founded on mere prejudice arising from the mortality due to alcoholic excess. Dr. Solf, however, holds that the necessity for a German tropical empire lies in the need for their produce, and not in emigration. I do not here refer to the military aspect of this scheme, which was designed 'to tear asunder North and South America, and 'affect India, Australia, and East Asia' (p. 55).

Such is the German ideal as described by an acknowledged authority at the moment when he thought the fruit to be within his grasp. He admits the prosperity which has followed the 'false humanitarianism' of England, quotes the notable success of the Gold Coast native cocoa industry, and states that the export of palm kernels from Southern Nigeria in 1912 was 7½ times, and that of palm oil 14½ times greater than the combined output of the Congo State, French Equatorial Africa, and the Cameroons, though they were 21½ times its size. Other Germans have considered it wiser to be less outspoken, but all have adopted the same principles, and not one that I know of has raised a voice of protest. In my own experience I can vouch for the general accuracy of his descriptions, as regards the Cameroons.

Germany is not to be allowed to retain her former colonies, but it has yet to be decided whether the door should be thrown wide open to her, and she should enter on equal terms, to reap the benefit of the development entrusted to others. Without restricting the native market, it may be desirable to limit the quantity of raw materials which may be supplied to Germany, and to deny her the right to acquire long term leases of lands and minerals for a period.

The realisation of the obligation to develop the tropical areas over which she held control, and to act as trustee for the natives, did not originate with the rulers of England, but was the outcome of a national sentiment, and an instinctive public

opinion, to which our statesmen were slow to respond. France and Germany, our principal rivals, were actuated by the idea that the tropics could be colonised by white races. We did not need new colonies for our emigrants. Our statesmen dreaded the rivalry which later, at Fashoda and elsewhere, brought us near to a quarrel with France. They had accepted the responsibility unwillingly, and chiefly in order to safeguard our existing possessions. They invented the comfortable term, 'spheres of influence,' by which it was to be understood that they shelved all responsibility for control or development, but excluded any other nation from exercising it. They were willing to allow Germany to take Uganda—the scene of British missionary effort for over a decade, and situated on the sources of the Nile, whose waters are vital to Egypt—though it was included in the British sphere of influence, and treaties and pledges had already been made by a Chartered Company which represented the British people.

The French demand that effective occupation should alone constitute title forced the Government to convert their 'spheres' of apathy into 'Protectorates'—a term hardly less vague—nor was it easy to define the status of the 'British protected persons' who occupied these territories, or the degree of protection they enjoyed. They were placed under the Foreign Office, a department without experience of, or taste for, administration, and engaged in diplomatic duties of an altogether different kind. In its anxiety to evade responsibility, the British Government revived the anachronism of the Chartered Company—'the 'oldest, most indefensible, and, in theory, the most reprehensible 'of all forms of government.'* But public opinion had advanced beyond the 'Plantation System' (to which the Chartered Company was a partial reversion)—beyond the succeeding policy of laissez-faire, and allowing the natives to 'stew in 'their own juice.' Its verdict as to the retention of Uganda was emphatic, and the verdict was based on moral obligation.

The occasion, as ever in English history, brought the man. It was given to Mr. Chamberlain to interpret the feeling of the time. The Protectorates were transferred to the Colonial Office; two of the three African Chartered Companies were bought out. The dual principle of development for civilisation, and trusteeship for the native races, found its exponent at last in a

* Kidd, p. 38.

statesman. 'Our rule over native races (he declared) can only 'be justified if we can show that it adds to the happiness and 'prosperity of the people.' The development of this moral responsibility, and the obligation to give equal justice to the subject races, is sketched in a masterly way by Sir Hugh Clifford in a brochure recently published.*

The pious aspirations of the Conference at Brussels a quarter of a century ago—grudgingly observed by many of its signatories —are now to be established, with world-wide sanctions and safeguards, at Paris. The ideals of the reformer—whether he be a student, striving to raise men's thoughts above the dust of the march of civilisation, and pointing a hand to the heights beyond (as the Premier has finely said), or whether he be the active worker, striving to translate those ideals into practical form, amid adverse criticism and the trammels of routine—have now gained substance. The ideals of yesterday are the commonplaces of to-day.

'But,' writes Mr. Kidd (p. 14), 'though the tropics have pro-'duced no example of native government successful in the 'European sense, no school of thought has suggested any scheme 'of policy for their government which possesses the merit of 'being generally accepted in principle.' The reason is not far to seek. No 'school of thought' could elaborate 'schemes of 'policy' in a field of activity so little understood, and it is well that so baneful a project was not attempted. A policy and a form of government suited to the circumstances could only be evolved by daily experience on the spot, by meeting each difficulty as it arose, by patient and gradual evolution.

England has never been lacking in men of the type required—not necessarily of intellectual brilliancy, but possessed of energy, integrity, humanity, and devotion to duty. In East Africa and Uganda, in Nyassaland and West Africa, they set to work with enthusiasm for their task and belief in their Chief. The principles which actuated them all are well summarised by Mr. Kidd; native rights, institutions, religions, and a limited self-government should be maintained. Progress should be on native lines, and effected by the prestige and example of the controlling race. The administrators should have the tradition of English gentlemen in touch with their own race. No exclusive

* 'The German Colonies—a plea for the Native Races,' by Sir H. Clifford.

advantage in the markets should accrue to the Power in control.

There was no need to preach these principles; and, so far as I know, no hint of them was suggested. With a truly wonderful unanimity, they were the guiding principles in every British colony and protectorate of Africa. They were not necessarily dictated by the Governor, but each Resident or Commissioner, each district officer, applied them of his own initiative. Their adaptation varied—as it ought to vary—with the circumstances and conditions of each district and country, but the spirit was the same.

If I take Nigeria in illustration of the progress which has been made in the last two decades, it is merely because for the greater part of that time I happen to have been entrusted with the government of a part or the whole of it, and can, therefore, speak with fuller knowledge than of other parts of Africa.

First, as regards the system of government. The object in view is to create a form of administration, in which the controlling Power will have the hearty co-operation of the people themselves; which shall gradually imbue the native rulers with something of the spirit which animates the best type of administrator. The system which was evolved by the political staff of Northern Nigeria may be thus briefly described.

The British officer who represents the Central Government acts as a sympathetic counsellor and adviser to the native Chief. His advice in matters of policy and importance must be followed, but the native ruler issues his own instructions to his subordinate Chiefs, not as the orders of the Resident but as his own. The British staff conveys any necessary directions through the responsible native rulers, just as a commander of a division would convey his orders to a Private through his commanding officer. The ordinances of government are operative everywhere, but the native authority makes by-laws which are approved by the governor, and enforced by the native courts. These courts are entirely native, and administer native law and custom only. They are under the close supervision of the British staff, which intervenes in any case of miscarriage of justice. The superior native courts in the Moslem States, presided over by native judges learned in Mohammedan law, exercise unlimited powers. A comparatively small income-tax replaces the former 'tribute' and all irregular levies and forced labour. It is levied in the

name of the native ruler, who takes half for his native treasury, and pays half to the Central Government. From the half share thus appropriated (to which are added the fines and fees of the native courts, market dues, etc.) he receives his own stipend, and pays his judges and councillors, the district headmen who control the various portions of his kingdom, and the village headmen who help to collect the tax. Assessment is carried out by the British staff in conjunction with the district and village heads. The paramount Chief, with the assistance of the Resident, annually prepares a budget of revenue and expenditure. After provision for all salaries, the surplus funds are devoted to road construction, native public buildings (court houses, schools, etc.). The native staff of the government schools is paid from them. The budget is formally approved by the Lieut.-Governor and Governor-General. It is the consistent desire of the British staff to maintain and increase the prestige of the native ruler, to encourage his initiative, and to support his authority.

There are fifty separate native administrations of this character in the Northern Provinces (formerly Northern Nigeria). Their aggregate revenue in 1917 amounted to £441,000. They had invested funds (for any famine or other emergency, or for any large enterprise) to the amount of £255,600. Kano, the largest and wealthiest, had an annual revenue at the disposal of its native administration of upwards of £69,000. The loyalty of the Moslem Chiefs during the war has been no mere lip-service. Daily prayers for His Majesty's victory have been offered in the mosques. The treasuries between them offered over £50,000 a year towards its cost. This year they subscribed £11,000 to the Red Cross. The Sultan of Sokoto, however, declined to subscribe from his treasury, saying that he and his Chiefs preferred to give from their private means for such a cause.

The system finds its most complete realisation in the Moslem States, but its principles are also applied among the most primitive tribes, and since the amalgamation of Northern and Southern Nigeria it has been extended to the principal communities of the South.

There is here no attempt at creating independent native rulers. Legislation and its corollary, the control of armed forces for the suppression of violence, and the general direction of policy, remain in the hands of the controlling Power. But the position of the paramount Chief as the ruler of his own people, and the interpreter to them of the policy of government, is

jealously safeguarded. It is a system which can be continuously developed by almost imperceptible degrees in self-government. It differentiates sharply between the indigenous native, who is governed by his own native law and custom, while amenable to the Protectorate courts, and the alien (native or other) with his different modes of thought and education, who is under the direct control of the Suzerain Power.

The second matter, which it is worth while to examine, is the extent to which the controlling Power has in practice been able to give effect to those aspirations for the benefit of the African races to which the Brussels Act was the first to give expression, and which the draft constitution of the League of Nations again brings forward in Article 19. They were—(1) Restriction of firearms; (2) the suppression of the slave-trade; and (3) restriction of the liquor traffic. Of the first there is little to say. The object in view was not merely to limit the power of the slave-raiders, and to check the effects of inter-tribal warfare, but also as a measure of self-defence by the controlling Powers. The object is fully effected by legislation and control at the seaports. The strictest supervision and registration of arms in possession of Europeans or authorised natives is carried out. The fact that it is, in the first place, by virtue of our superiority in, and monopoly of, weapons of war that we gained and hold our position, adds to the moral obligation towards the subject races.

The second head is slavery. Before the control of the European nations was established in the interior, the tribes of Africa were subject to the law of might in its crudest form. The dominant tribe exterminated or enslaved the weaker. The conscience of Europe, smarting from the realisation of its crime in the overseas slave-trade, and knowing Africa only by its contact with its seaports, imagined that slavery was introduced by aliens. Having passed a self-denying ordinance on its own account, it set to work, at vast cost, with the machinery of the Brussels Act, to enforce its behest upon the Arab and Turkish slave-traders. It surprises us to recollect to-day that in the debates of 1893 the fact that slavery was an indigenous institution among the tribes of Africa was new to the majority of the House of Commons—or to read of the Cities of Refuge solemnly devised by the Powers at Brussels.

The overseas slave-trade may be said to be dead, and the wholesale raiding for slaves by organised Moslem armies to supply the harems and to till the fields of the dominant class has

in turn been suppressed. In no country was this carried on on a larger scale than in Nigeria only some fifteen years ago. It is now a legend of the past, and even domestic slavery is fast following it to extinction. How a band of devoted young administrators secured this great reform, without dislocation of the social system, or impoverishment of the ruling (and slave-owning) classes, is a matter with which this article is not concerned. It is sufficient to say that throughout the Moslem States there is to-day probably no slave who is not fully aware that he can assert (not merely claim) his freedom if he wishes; that all children born since 31st March 1901 are free at birth; and above all, that the old relationship of master and slave is now replaced by that of master and servant. The ruling classes are increasingly recognising the advantage of free, paid labour, and the native courts are engaged in issuing redemption papers to those who wish for the sanction of native public opinion for the recognition of their free status. The records show 55,000 such voluntary liberations.

Let us regard this matter with an unprejudiced eye—so far as that is possible for those bred in the traditions of Christian ethics for nineteen centuries. That notable slave-owner and great man, Zubeir Pasha, claimed that by enslaving his captives he had effected a great reform. It was the first milestone on the route from cannibalism and ruthless extermination. Among primitive and wholly illiterate peoples, slavery was the only possible form of labour contract. As social evolution progressed, the fact that the slave had rights, and the obligation of his master towards him in sickness and old age, became increasingly recognised, and with that recognition the disadvantages of the system to the owner became more manifest. The abolition of slave-raiding was the second milestone, and the recognition of the slave's right to assert his freedom at will was the third.

But labour is necessary for railway construction and other works which benefit the community and develop the resources of the country. The primitive folk, many of them industrious and eager to earn money and make purchases, feared the powerful white man, who had coerced even the dreaded slave-raiders. Some temporary pontoon was needed to bridge the flood of doubt and fear. Coercion through their chiefs was resorted to. Gangs of labourers were procured under their own leaders, but in Northern Nigeria, from the earliest dawn of British administration, the principle was laid down that each

labourer was paid his day's wage into his own hands, and not through his Chief. Facilities were given for the purchase of his requirements—salt, tobacco, cheap cloth, and pots and pans—and when his fields demanded his presence he was free to go.

The result has been all we had hoped. The unwilling tribesman returned as a voluntary labourer, and his education was carried a step further by the introduction of piece-work, and the conception of a fair day's wage for a fair day's work. Throughout the Northern Provinces it has now been possible to abolish any form of coercion, and the same result is almost in sight in the south. It is a milestone worth much effort to reach. It has been won by the untiring and unostentatious work of the administrative staff and of the construction staff of the railway and of the colliery.

We come to the third head—the restriction of the liquor trade. An expert committee was appointed in 1899 to report on this question. Their verdict was in effect that its influence in demoralising the natives could not be substantiated. But even if, *argumenti causa*, we concede so much, it remains a fact that the one and a half millions sterling spent yearly on liquor by the population of Southern Nigeria did nothing to raise their standard of life, while the reciprocal advantage to the trade of the controlling Power was nullified. For the spirits came not from England, but from Holland and Germany, and decreased *pro tanto* the market for British manufacturers. I agree with Mr. Chamberlain's verdict that the traffic was a disgrace to British administration and fatal to British trade.

Before the war four and a half million gallons were imported into Southern Nigeria (sale to and even possession by natives of the north was strictly prohibited), and a revenue of about £1,120,000 was realised in duties. These were rapidly increased, not for revenue purposes, but with the intention of decreasing and ultimately abolishing the trade. From 5s. 6d. a gallon in 1913 they now stand at 10s.—about 500 per cent. *ad val.* I cannot say how far this drastic step would have effected its purpose, for the war intervened, and spirits became unobtainable.

For two years Nigeria has not shown in her budget a single cent from duties on 'trade spirits,' and it has thus been proved by actual demonstration, on the one hand, that the revenue formerly derived from this source can be dispensed with, and, on the other hand, that trade can be carried on, and the native will still bring produce for sale without spirits. A

further step has also been taken in the control of the sale by means of licences as a precaution for the future, for it is reported that Rotterdam is fitting out a vessel with a full cargo of spirits, and America is offering gin to replace the continental import. The merchants of Liverpool have petitioned for its temporary prohibition, pending examination of the question. Their petition has been favourably received, and I trust that these precautions will not be necessary. The area in which imported spirits may be possessed by indigenous natives is less than one-fifth of Nigeria, and this area has lately been curtailed.

There remains the local manufacture of fermented drinks. It has been carried on from time immemorial, and to check or control it is impossible in present circumstances. A much larger degree of administrative control, with a larger staff, is necessary. It is the next milestone, and is still far distant. Some progress may thus, I think, be claimed in the difficult task of giving effect to the new ideals in British Colonies and Protectorates. The administrative efforts of the Americans in the Philippines are described by my friend, Mr. Elliot, in his account of American rule in those islands,—of which he can justly say '*quorum pars magna fui*.' Space forbids me to touch on these achievements, or to refer to the rôle of France in tropical Africa.

The conference has decided that the tropical regions, wrested during the war from the misrule of Germany and Turkey, shall be held in trust by a Mandatory of the League. Once before, the seventeen principal Powers of the world sat in conclave to decide the fate of large areas of the tropics, and appointed a Mandatory. The 'Congo Free State' was created and declared neutral and free to the trade of all nations. Before a decade had passed it was neither neutral nor free. Belgium had acquired the right of annexation, and France of pre-emption. It is not too much to say that under King Leopold as the Mandatory of Europe every principle laid down by the mandate was reversed. This is all now happily changed, but it lies with the Conference of Paris to ensure that the mandates of the League are more effective than were those of the Conference of Berlin in 1885.

Above all it is essential not to set up 'the fiction that 'the Power which represents civilisation is in occupation only 'temporarily.'* There is nothing more fatal to success in obtain-

* Kidd, p. 36.

ing the confidence and co-operation of native races than this, and nothing they are more prone to imagine. The mandatory Power which is to bear the white man's burden on behalf of civilisation must not start with this heavy handicap. It must not be subject to appeals from its jurisdiction and policy to the Executive of the League, or it can never succeed. Let the mandate be final, and perpetual until revoked, and entrusted to a Power which has experience of the task, and has proved that it realises its great responsibility, while the League reserves power to intervene if after a reasonable time the mandatory fails in its task and is condemned by public opinion. Let periodical scrutiny be exercised only by fully competent judges familiar with the nature of the work. Duality of control and any form of internationalisation is a fatal mistake.

There remains the unsolved problem—so far as the British tropics are concerned—*Custodes ipsos quis custodiet.* How is control to be exercised over those who themselves control the destinies of these vast regions, without hindering local development?

It is perhaps hardly appreciated in England how vastly the business of the Crown Colonies and Protectorates has increased in the last two decades. Nigeria alone—the latest and the youngest—is nearly a third the size of British India, with a population of 17,000,000 or more, with one or two hundred languages, a trade of over £17,000,000, and a revenue of over £4,000,000. Its problems of government are concerned with the European merchant, the mine manager, the missionary, the educated native barrister of the coast, the Moslem Emir, and the naked cannibal—with education, trade, finance, and the development of railways, harbours, and collieries. Yet it is but one colony, and each has its similar problems.

The Dominions have claimed a new status They now form the United Nations of the British Empire. But the progress of the Crown Colonies has been no less rapid. They too feel that the old machinery needs repair and revision. How this should be effected is the question which is now being anxiously asked in all these dependencies of the Crown which stretch from sea to sea, which embrace peoples of every creed and colour, and every stage of development. Upon its answer more may depend than the politician or the man in the street can realise.

F. D. LUGARD.

CLIVE, WARREN HASTINGS, AND THEIR BIOGRAPHERS

1. **The Life of Lord Clive.** By Sir GEORGE FORREST, C.I.E. 2 vols. Cassell & Company Ltd. 1918.
2. **The Administration of Warren Hastings.** By M. E. MONCKTON JONES. Oxford University Press. 1918.

TO write on Robert Clive and Warren Hastings in the EDINBURGH REVIEW is to tread on hallowed ground, or on ground, at least, that has been marked by ineffaceable footprints. For it was in these pages, nearly eighty years ago, that Lord Macaulay published the essays which fixed deep in the minds of his countrymen and foreigners the images of the two master-builders of the British Empire in India. The article on Clive appeared in January 1840, that on Hastings in the number of October 1841. Nothing printed in the EDINBURGH, or in any other periodical publication, created a more instantaneous impression, or has had a more lasting effect. Macaulay's 'Essays' may continue to be read when his 'History of England' is neglected; and these two, at any rate, will endure, even when the criticism of Milton, the analysis of Bacon's philosophy, and the dissertation on Ranke's history of the Popes, have lost their interest.

With all their faults, and they have many faults, these essays are pieces of amazing talent. They exhibit the author sometimes at his worst but very often at his best. Nowhere else is that scintillating, rapid, remorselessly direct style of his more successful; nowhere does he show in a higher degree his power to flash a sequence of moving pictures across the screen, to seize the dramatic elements in a series of events, to dash in upon the canvas, with bold strokes and vivid colouring, portraits which are not always faithful but are always alive.

Macaulay's vigorous imagination had not in this case to feed on books and documents alone; for it had been warmed by contact with the atmosphere and scenery of southern Asia. He had spent four busy years as Legal Member of the Viceroy's

Council. True, during that period he was immersed in his legal and educational tasks, and knew little of India outside the offices and compounds of Calcutta, and the bungalows of Simla; the greater mysteries of the land, even the details of Anglo-Indian administration in the districts, were hidden from him. But he had faced his Vision of India, and it unrolled itself before his retentive memory, so that writing under the dim skies of England he breathed again the airs of Asia, he felt the smiting sword of the Eastern sun, and recalled the brown villages and lush green fields of Bengal. It was not mere history he gave his readers, but also descriptive journalism, almost the first of its kind, and some of the best.

Critics there are who would say that it is indeed journalism, and only journalism, with its haste, its superficiality, its ephemeral appeal. They would protest that it is not history at all. They would be surely wrong. The two essays exhibit Macaulay's habitual errors of careless statement, prejudiced judgment, misplaced emphasis, and rhetorical exaggeration. But they have the prime historic merit of recreating the past, of clothing with flesh and blood the bones of men who had ceased to be, of making the reader live through the events which are presented to him as narrative. That is the historian's quality, the quality we find in Herodotus, Tacitus, Gibbon, and in all the greater masters of the art.

The importance of the two essays has been disproportionate to their comparatively limited dimensions, and perhaps to their merits. Sir George Forrest is undoubtedly right when he says that the majority, even of educated Englishmen, have derived from them all they know of the history and politics of British India. Everybody has read them; a great many people have read nothing else bearing on the subject; or if they have read anything it has passed from their consciousness while the essays are remembered. 'Every schoolboy' has had to get them up as a holiday task; thanks to them he knows, and but for them he probably would not have known, something of the state of India before the British and French began to struggle for supremacy there, something of the break up of the Mogul Empire under the impact of revolting feudatories and Mahratta raids, something of the steps by which a company of traders in cloth and cottons became rulers and conquerors. It was Macaulay who made the ordinary, unreflecting Englishman or Scotsman feel

the splendour and romance of our great achievement in Asia, and gave him an interest in the soldiers, statesmen, and administrators who brought it to fruition. The most of us know little, far too little, of the history and the institutions of India; but for Macaulay there are many who would know nothing. Neither the English electorate nor the English Parliament has ever given more than the most casual and intermittent attention to the politics and affairs of our Eastern dependency. At the present moment a revolution in Indian administration, more extensive than Pitt's India Bill, or the transfer of the Company's powers to the Crown, is in contemplation. Whether it be politic or unwise, big with hope or pregnant with disaster, it is assuredly of vital import. Yet it is safe to say that not one British elector in ten thousand is acquainted with the barest outlines of the project, and not one in a hundred thousand has bestowed thought and study upon it. 'A broken head in Coldbath Fields' may still, as in Macaulay's time, attract more popular interest than the fall of a kingdom in India.

That being the case it is fortunate that some acquaintance with the events which led to the rise of the British dominion in Asia has passed into the stock of common knowledge because a brilliant essayist planted it there. And it is also fortunate, since his work holds so large a place in the popular consciousness, that it is, in its broad lines, correct. Macaulay's graphic account of the state of India in the eighteenth century, and the anarchy which prevailed while the monarchy of the House of Timur was in the throes of dissolution, is an incomplete sketch. But it is a very good sketch, firmly and clearly drawn, and those who have looked at it are well prepared to go more deeply into the subject if they care to do so. Here, at least, Macaulay does not mislead his readers; he has bitten into their minds an impression which may safely be allowed to remain.

In some degree this merit may be allowed to the portraits of his two heroes, though there must be considerable qualification, especially in the case of one of them. Badly as he has misrepresented some aspects of Clive's character, and unpardonably unfair as he is at times to Hastings, he has at any rate made the striking episodes of their career familiar to everybody. The story is told with so much vivacity, and with so keen an appreciation of every dramatic circumstance, that we cannot

forget it. We all know what things Robert Clive and Warren Hastings did ; though we may have to turn to other guides if we wish to examine their actions in the closest relation with the motives and the conditions by which they were determined.

Two such guides are the authors of the books before us. Neither Sir George Forrest nor Mr. Monckton Jones attempts to compete with the writer of the famous Essays on his own ground. They are not endowed with Macaulay's literary skill, nor can they fascinate us by vivacious narrative and the glow of a radiantly expressive style. But they have devoted themselves to that intensive research of original authorities, and that close examination of documents, for which Macaulay had neither the leisure nor the inclination. They have learnt how to handle a mass of material under the exigent rules of modern historical scholarship, which does not reject hypothesis and suggestion but requires that they shall be fortified by evidence carefully sifted and systematically considered. Mr Monckton Jones applies this method, with extreme diligence and sound judgment, to two years only of Hastings' first tenure of office as Governor of Bengal ; a short period, but one in which the whole foundation of the future administrative system of British India was laid. How important and far-reaching the legislation of Hastings was in these years is explained and illustrated by the publication of a large number of manuscripts which Mr. Jones has drawn from the collections in the India Office and the British Museum. These extracts form a valuable supplement to the three folio volumes of 'Letters, Despatches, and other State Papers pre-'served in the Foreign Department of the Government of India, '1772-1785' on which Sir George Forrest based his own competent and judicial account of 'The Administration of Warren Hastings' (Calcutta, 1892). This latter volume might well be republished in a popular and accessible form. Taken in conjunction with Mr. Monckton Jones' book it gives an adequate view of the most beneficial side of Hastings' activities, to which sufficient justice has never been done, because it was overshadowed by the bitter quarrel with Sir Philip Francis, prolonged and continued as it was by the Whig politicians who managed the Impeachment.

Sir George Forrest deals with the whole of Clive's career in a similar spirit. He has rewritten the life of the great soldier-statesman from all the original documents that are available. Many of these had never been examined before, others were

only submitted to hasty and unsystematic inspection. Sir George has studied the manuscripts in the archives of Calcutta and Madras with which he has an unrivalled familiarity; and he has also opened a new vein by exploring the material relating to Clive at Pondicherry and Paris, which gives the contemporary French view of the struggle for European predominance in Bengal and the Carnatic. He has had before him, and very carefully weighed, the vast accumulation of papers in the possession of Clive's descendants. These manuscripts were placed at the disposal of Sir John Malcolm for the purpose of his 'Life of Clive'; but Malcolm was too much occupied with official duties and political interests to devote concentrated attention to his biography, which he wrote hurriedly, and left unfinished, so that his examination of the Powis MSS. was superficial and perfunctory. Gleig, whose popular 'Life of Robert, 'First Lord Clive' (1848), has been several times reprinted, does not appear to have seen the Powis papers at all, and was content to rely on Malcolm's ill-arranged excerpts. Sir Alexander Arbuthnot in his brief memoir of Clive, written for the 'Builders 'of Greater Britain' series (1899), draws his material mainly from printed records and from Malcolm, Gleig, Mill, Malleson, and other historians and biographers who preceded him. In spite of this, and the modest scale of his work, it is on the whole the most impartial and critical survey of Clive's career which had seen the light before Sir George Forrest's volumes. In this respect it may be compared with Sir Alfred Lyall's 'Warren 'Hastings' ('English Men of Action' series, 1889), an admirable monograph, which only errs on the side of brevity and compression and an almost excessive moderation and restraint. Lyall, with his poetical and artistic accomplishment, and his wide oriental learning, might, one thinks, have written a Life of Hastings which would have taken rank among the great literary biographies. But he seems afraid to 'let himself go.' So does Sir Alexander Arbuthnot. I suppose the later biographers of Clive and Hastings, acutely conscious of the partisanship of their predecessors, have been anxious to steer clear alike of hero-worship and undue depreciation. Perhaps they felt that strong colour and high lights had been too liberally worked into the picture already.

Sir George Forrest does not let himself go either. He has not done for Clive what Southey did for Nelson, or Lockhart for

Scott; that is to say, his book is a contribution—in the terms of De Quincey's famous definition—to the Literature of Knowledge rather than the Literature of Power. It does not paint a portrait which will live through the ages by the mastery of its composition, the charm and vigour of its artistry, and the genius which can reanimate character and personality. Here, one can say, is not the definite and final biography of Robert Clive, the office-clerk who founded the British Empire in Asia, and died by his own hand at forty-nine. Perhaps that biography will never be written; but perhaps some great writer may adventure upon it; and if so he will find in Sir George Forrest's volumes all the material he needs. From these quarries he may draw, if he has the right craftsman's hand and seer's eye, the stone and marble of his monument. The book is largely made up of copious extracts from the manuscript and other sources. This does not improve its literary form; but from the historian's point of view the method may be accounted to the author for righteousness. Here we have presented to us all the material for examining Clive's deeds and motives as they are revealed by his own testimony and that of the best contemporary witnesses. 'Clive's 'actions,' says Sir George Forrest, 'and his inmost thoughts are 'now given in their integrity to all who read our English.' Most of the controversies which have raged intermittently round his name for over a century and a half should now be laid to rest. This long array of authentic evidence, judiciously sifted, analysed, and summarised, leaves little further excuse for them.

Clive's reputation suffered in the estimation of his contemporaries, and it has suffered to some extent since, because of his amazing success. No man in recent centuries, with the exception of Napoleon, rose from obscurity to power and greatness so rapidly or so early in life; and Clive not only led armies and ruled nations but accumulated a vast fortune. He made money faster than our most successful modern financial exploiters, and he made more of it (relatively to the standards of his time and our own) in a shorter period. He began life as a 'writer' in the East India Company's counting-house at Madras, without means, without influence, without useful connections, with a pittance for his pay, and the education of a rather backward schoolboy. At twenty he was making out bills of lading and forwarding parcels, an unknown and un-

noticed youth. At twenty-six he was a soldier who had fought successful battles, and captured and defended famous cities; at thirty-two he had won a victory which resounded through the world, he had gained new provinces for Great Britain, and had checked the onward stride of the first military Power of the earth. For three years he was the virtual ruler of a territory larger than Germany or France, the master of obedient millions, an arbiter who set up kings and dethroned them at his will. He was under thirty-six when he returned to England, to be acclaimed by the great Pitt as 'a heaven-sent general,' to receive the riband of the Bath, an Irish peerage, and a seat in Parliament. This was not all. The young soldier had acquired property which yielded him an income of £40,000 a year, and an income of £40,000 in 1761 meant more, and counted for more, than an income of £150,000 to-day. With the exception of a few great landed proprietors, Clive must have been almost the richest man in England.

Many who could forgive him his glory could not forgive him his wealth. Some have hardly forgiven him yet. It was felt that money so rapidly amassed could only have been obtained by fraud or violence. Though Clive was open as the day about his accumulations—though he made no secret of the manner in which they had been gained, condescending neither to concealment nor to apology—it was insisted that he must have been unscrupulous, self-seeking, and cunning, to have wrung this sudden fortune out of the poverty-stricken natives of Bengal. It was forgotten that the potentates whom Clive despoiled were themselves spoilers of the poor—princes, chiefly of alien blood and race, who had amassed treasure by plundering their helpless subjects, or delivering them over to exorbitant tax-gatherers and merciless revenue-farmers. The presents received by Clive were themselves the fruit of years of robbery and oppression. The *jaghire* bestowed upon him by Meer Jaffier, with the full knowledge of his employers, would otherwise have been assigned to some favourite courtier of the Nawab, or to some Hindu banker who had advanced money at usurious interest. Malleson, whose hostile memoir of Clive repeats in 1882 the bitter criticism of James Mill, thinks that these transactions reveal an inherent baseness and duplicity in Clive's character. But there was nothing base or mean in Clive. He was an ambitious man of action, not hampered by a sensitive delicacy which might have

placed him above the public morality of his age. He saw no reason why the services he had performed for the nation and the Company should not be amply, and even lavishly, rewarded. It was the custom for those who held high political office to receive perquisites from their clients and dependents, a custom not limited to the Ganges basin. At a time when Paymasters-General and Lords of the Treasury in Whitehall were filling their pockets at the cost of the British taxpayer, Clive was not disposed to reject the donations of Indian princes who owed him their lives and their thrones. There is not a particle of evidence to show that he ever allowed himself to be deflected from what he deemed the right course by any consideration of personal profit; and it must be remembered that when, at the urgent request of the Company, and against his own wish, he resumed the Governorship of Bengal in 1765 he refused all remuneration and emolument, and gained no pecuniary benefit from his two years of arduous labour, which were of inestimable service to the Company, though they left his own health irreparably shattered.

The sentiment which was roused against Clive during his later years, artificially stimulated by his opponents in Parliament and the India House, was aggravated by the fact that he was the most conspicuous representative of an unpopular class. Everybody recollects Macaulay's graphic description of the 'Nabobs' who pervaded English society, and disgusted it with their vulgar ostentation, in the later years of the eighteenth century. I believe the picture is overdrawn. Macaulay may have relied too much on Foote's play, *The Nabob*, which is a pungent satire on the Anglo-Indian parvenus. He perhaps overlooked the fact that this farcical comedy was the playwright's answer to a direct challenge from Clive himself. In his speech in the House of Commons on March 30, 1772, Clive said that while many charges were made against the conduct of the 'Nabobs' in India, nobody could say a word against them when they were at home:—

'Look at them in a retired situation, when they are returned from India, when they are no longer Nawabs and sovereigns of the East; see if there be anything tyrannical in their disposition towards their inferiors; see if they are not good and humane masters. Are they not charitable? Are they not benevolent? Are they not generous? Are they not hospitable? If they are, thus far, not contemptible members of society, and if in all their dealings between man and man their

conduct is strictly honourable, if, in short, there has not been one character found amongst them sufficiently flagitious for Mr. Foote to exhibit on the theatre in the Haymarket, may we not conclude that if they have erred it has been because they were men placed in situations subject to little or no control?'

Mr. Foote retorted by showing that he could compose a play which made the returned Anglo-Indian look foolish and unpleasant; but it was not one of his best plays, and we need not attach much importance to the caricature.

Clive, however, was the typical 'Nabob,' and no doubt all the hostility directed against this class gathered round him. He made no attempt to avert it by any appearance of humility or self-effacement. The wealth he had gained in India he spent generously, openly, ostentatiously. He was brave, honourable, kindly and just, with a grasp of realities, and a supreme capacity for action, such as only a few of the very greatest leaders of men have shown. But there was some coarseness of grain in the large texture of that massive intellect, that strong and virile character. Clive was a realist, with a high contempt for the subterfuges and self-deceptions with which men veil their motives and actions. His aims had been high, and he had no patience with those who cavilled at the means by which the most astonishing successes had been secured; nor was he restrained by any excess of modesty from giving their due value to his own exploits, and insisting with proud emphasis that he had deserved, and more than deserved, all the rewards he had received. There was no smallness or meanness in his public aspirations. He 'dreamed in Empires,' and kept before him the vision of Great Britain, controlling, tranquillising, and bringing to order the immense chaos of India, and by the wealth and resources of that vast domain rising to the premier place among the nations of the West. The man who had launched his country on this broad road of glory and power—ought he not to have all he desired or needed to gratify his ambitions? So Clive thought, and so he frankly said. The ambitions, it is true, were material, we might even say, a little vulgar. Clive liked the outward and visible tokens of worldly success—wealth, pomp, titles, decorations; he was annoyed that he did not receive an English earldom instead of an Irish peerage. And he was indignant, and righteously indignant, at the persecution with which he was assailed, and at the malignant party spirit

that sought to cover with obloquy actions for which he maintained that he had merited only gratitude and applause.

His reputation has also been insensibly affected by the manner of his end. Suicide cast a shadow over his name as it did later over that of Castlereagh. Dr. Johnson, listening to some eulogy of Clive, bluntly interjected:—'Yet this man 'cut his own throat.' Suicide in the eighteenth, and most of the nineteenth, century was regarded as a proof of moral and spiritual depravity. The Almighty, who had 'set His canon ''gainst self-slaughter,' had been defied; and there were some who thought, and even said, that 'the great wicked lord' had taken his own life from remorse for his evil deeds. Modern alienists have learnt that suicide is not a crime, but a disease, that it is due to pathological causes, or an hereditary predisposition, more often than to wickedness or world-weariness. As a very young man at Madras, Clive, in a fit of depression, twice snapped a loaded pistol at his own head. The weapon failed to explode; and Clive believed that he had been reserved for something great. If the story is true it would seem to show that he had a suicidal tendency which, sooner or later, would manifest itself again; for a person who has once made an unsuccessful attempt upon his own life is almost certain to repeat it.

The worst of the charges brought against Clive's Indian administration were effectually disposed of by his speech in the House of Commons on March 30, 1772, in reply to the Motion introduced by his bitter enemy, Sullivan, the deputy-chairman of the East India Company. The speech was an extremely skilful performance, assuredly exhibiting no trace of mental failure or weakness, a little arrogant and egotistical in places, but for the most part admirable in style, temper, and argument. It convinced the House of Commons that nearly all the accusations were gross distortions of fact, and it crumbled away the vast edifice of misrepresentation and exaggeration piled up by Clive's opponents. The case of Omichund and the famous secret treaties was dealt with almost contemptuously, and with Clive's habitual disregard of the conventional hypocrisies of English public life. The House in its virtue was shocked, as many good people have been shocked since, at the spectacle of an eminent statesman frankly confessing that he had defeated an utterly unscrupulous trickster by trickery of superior effectiveness. It was done in the public interest; it was the only way

of averting danger, perhaps calamity ; and Clive bluntly told his hearers that he would be quite ready to do the same sort of thing again if necessary. Nevertheless, people have continued to shudder over Clive when they refer to the Omichund incident ; and even if they concede that the end may have justified the means they are sorry to think the means so bad.

Sir George Forrest retells the true story of Omichund, and brings further evidence to support Clive's statement. He shows that there was not the least reason for treating the Brahman with generosity or indulgence ; for Omichund was something even worse than an extortioner, a blackmailer, and a traitor, He it was, rather than his master, Surajah Dowla, who was responsible for the tragedy of the Black Hole of Calcutta. When Clive joined Meer Jaffier, and the Hindu bankers of Moorshedabad, in the plot to dethrone the treacherous and tyrannical Nawab, it was deemed necessary to make Omichund a party to the conspiracy But on the very eve of its execution Omichund demanded an enormous money payment and a substantial share of the royal treasures. Unless this was agreed to in a written covenant he threatened to disclose the whole scheme to the Nawab, who would no doubt have instantly seized and put to death Meer Jaffier and his confederates, together with Watts, the agent of the Calcutta Government, and the other English at his capital ; and he would probably have broken off all relations with the Company's representatives and thrown himself into the arms of the French. The peril was as grave as possible ; not only were British lives at stake but, as Clive saw, the whole future of our policy in India. To yield to Omichund would have irritated Meer Jaffier's chief supporters ; it was too late to defy him. So the celebrated device of the two treaties was conceived. The treaty on white paper was the real one, and was sent to Meer Jaffier ; it made no mention of the heavy payments to Omichund. Those payments were included in a fictitious document, written on red paper, which was only intended to be shown to the Brahman. The members of the Calcutta Select Committee signed both treaties : but Admiral Watson, who commanded the King's ships and was the most important European in Bengal next to Clive, refused to put his name with his own hand to the bogus agreement.

The omission of this influential name might have awakened Omichund's suspicions. 'But Clive,' says Macaulay, 'was not 'a man to do anything by halves. We almost blush to write it.

'He forged Admiral Watson's name.' Forgery, no doubt, is a blushing matter. There is, however, no evidence that it was Clive who affixed Watson's name to the document, and there is plenty of evidence that whoever did so acted with the Admiral's acquiescence and under his authority. Watson was present at the meeting of the Select Committee in which it was decided to deceive Omichund by a double treaty. He made no objection to the plan; read the fictitious agreement when it was submitted to him without expressing the least disapproval; and sent it back by one of his secretaries, who either himself affixed the Admiral's signature, or authorised some other person to do so. Watson, though 'a strict principle of delicacy' would not allow him to sign the deceptive document with his own hand, was a party to the transaction; he was quite aware that his name was to be appended, and he never showed the resentment which might have been expected from a bluff and plain-speaking naval officer if the Committee had used his signature against his wishes or without his knowledge. What is more, when a settlement was made of Meer Jaffier's large donation to the Select Committee, after the revolution against Surajah Dowla had been carried through, Watson demanded an equal share with those members of the Committee who had signed the treaty. There is no 'forgery' where a person's name is written on an instrument by his own consent and under his responsibility. Clive did not 'forge' Admiral Watson's name, nor was that necessary; if it had been necessary he would have done so in order to counteract the devices of that 'rapacious villain,' Omichund, and avert a greater disaster from the English and those who had trusted them. He believed he acted rightly in a very difficult and perilous situation. All concerned in the matter—including Watson—thought the same.

Macaulay's lofty commonplaces over this episode are superfluous, and rather banal. On the whole, however, he deals fairly by Clive. His character study is not subtle nor penetrating: it needs a deeper psychology to bring us close to that powerful and soaring spirit, and reveal the springs of its being. Macaulay *more suo* displays and over-emphasises all that is paradoxical, contradictory, melodramatic; his picture 'lacks finish'; but the lines are bold and firm, and there is a rough fidelity in the portrait, at least for those who are content to form their estimates of personality without going very far below the surface. Sir George Forrest finds himself obliged to correct Macaulay's

details rather frequently; but I do not feel that his array of authentic evidence has substantially modified the impression produced by the essayist's rapid brush-work. Justice is done to Clive's passionate and inflexible will, his invincible courage, his quenchless energy, his sure and resolute judgment in moments of emergency; though more might have been said of his humanity, his generosity, his large and imaginative vision, the fortitude which left him superbly confident through danger, anxiety, persecution, and disease. The Rev. Dr. Gleig, remembering that he is Chaplain-General of the Forces, deems it necessary to apologise for Clive on the ground that he never showed the smallest religious feeling, and was habitually indifferent to the 'higher' motives for action. It may be so. Clive was not of the stuff of which saints and martyrs are made. He was a man of the eighteenth century, with no burden of 'obstinate 'questionings' and spiritual enthusiasms to clog his swift onward course. It was enough for him to make his country great, and himself successful, by the honourable method of conscientious work performed with the utmost skill and effectiveness. In the masculine force of his character, and the reach and vigour of his intellect, he was not surpassed or equalled by any of his contemporaries. Through the interval between Marlborough and Wellington he was the greatest English man of action.

In some respects his career is more remarkable and more puzzling than that either of John Churchill or Arthur Wellesley. Both these soldier-statesmen were educated and prepared for their vocation. Wellington was a trained soldier, a student, and a reader. Marlborough, it is true, did not begin to command armies and arrange alliances till he was middle-aged; but for many years before he had been at the centre of affairs, and in the most intimate contact with kings, courtiers, ministers, and ambassadors; he had breathed daily the atmosphere of politics, diplomacy, and war.

With Clive it was much otherwise. He owed next to nothing to books, training, systematic study, professional instruction, association with persons of experience and knowledge. He left school at seventeen, a 'wild' lad, whose teachers had found him idle and inattentive.* He passed a few uncomfortable years at

* If he was not a diligent schoolboy he was, as is known, courageous and enterprising, and the leader of his comrades in daring exploits. One of his preceptors had the sense to see that the fitful boy had

Fort St. George in an environment which could have added little to his mental equipment. His friends were factors and clerks or young subalterns, occupied in money-making, gambling, and dissipation. He had no opportunity of conversing with persons of culture and enlarged experience. He knew nothing of the world outside the Shropshire villages, the class-rooms at Merchant Taylors, and the counting-houses, the refection-room, and the 'Black Town' at Madras. When he received his commission as ensign 'in the second company of foot-soldiers at Fort St. David,' he had never seen more than a handful of European troops on parade, and could scarcely have met a military officer with any real knowledge of the principles and practice of warfare. Later he had the invaluable advantage of learning some of the details of his profession from Stringer Lawrence, though that fine commander confessed that he had little to teach the young officer. Clive was a soldier, as he was a statesman, by the light of nature. If we are to believe Napoleon and Marshal Foch a man becomes a consummate leader of armies only after prolonged reflection on the military art, and a close study of the battles and campaigns of the past. But what time for reflection and historical study had this youth who was himself a mere novice in arms when he was opposing the trained officers and scientific artillerymen of France, and who within a few years was directing a campaign by sea and land that spread over half Bengal? It is as baffling to ask how Clive acquired his soldiership as it is to inquire where he found the faculty to draft laws, devise comprehensive schemes of legislation, write State papers and minutes which are models of order and lucid expression, and deliver speeches which held and impressed a House of Commons accustomed to the eloquence of the finest debaters in Europe.

There are many definitions of genius. If I felt inclined to adventure on another I would suggest that genius is able to do great things without being taught to do them. It grasps by intuition the knowledge and mastery which for any ordinary talent can only be the result of an infinite capacity for taking pains. Clive, in his short life of forty-nine years, crowded with action, business, movement, responsibility, ambitious projects, and constant ill-health, could have had small leisure for study and

uncommon qualities. His first schoolmaster said of him: 'If that lad 'should live to be a man, and an opportunity be given for the exertion 'of his talents, few names will be greater than his.'

reflection, whether on strategy, statesmanship, or oratory. He did not need it. These things came to him by the Grace of God.

His military ability was wonderful, though we are not entitled to place him among the great captains of the world. He was never tested by handling large armies against really capable opponents, nor was he ever brought face to face with such formidable adversaries as were overcome by later commanders in India, those who had to subdue the Mahrattas and the Khálsa army of the Sikhs. The troops of the Mussulman princes of Bengal and the Carnatic were for the most part an undisciplined rabble, who owed such strength as they possessed chiefly to their European auxiliaries. Plassey, estimated by its consequences, was one of the decisive battles of the world ; but Surajah Dowla's army was a horde of doubtful mercenaries and disorderly camp-followers, incapable of cohesion or concerted movement, and, moreover, honeycombed by disaffection and treachery. A small resolute force, plunging into the heart of this huge mob, could disperse it as easily as a score of policemen can break up an unruly crowd. Clive's brilliant success was due to the clearness of vision with which he faced the essential facts, and the courage which led him to override his hesitating council of war, and act boldly and instantly upon his perception.

He showed the same courage, and the same grasp of realities, on many other occasions, notably in his suppression of the mutiny of the Bengal officers. Plassey, though it brought him fame and opened a new chapter in world history, made a less exacting demand upon his tactical skill and leadership than his earlier and smaller engagements at Arni and Kaveripák or his defence of Arcot. What one can say about Clive as a general is that whatever he was called upon to do he did to perfection ; and one cannot doubt that if the opportunity had been given him to exhibit his talent on larger and more difficult fields there, also, he would have succeeded. If his health and his life had held out a few years longer he might have been sent to replace the incompetent leaders of the British armies in America. In that event he might have changed the course of history a second time ; for there was hardly any period during the Revolution War at which a British commander of real energy and ability might not have overcome the ill-equipped and amateurish colonial levies. The historian may regret that he has been denied the singularly interesting spectacle of a contest in which Robert Clive would have been pitted against George Washington.

Warren Hastings has received worse measure from the biographers than Clive, though he was, if not the greater man of the two, in some respects the more attractive and interesting. It is true his reputation was not gained on the battle-field, and scarcely any reputation is quite so dazzling as one of that kind. Hastings knew how to plan and direct campaigns; he could find scope for the talents of good military leaders, and he himself as a young man bore arms in the East India Company's service. But he was not a soldier, and his most important achievements —still scarcely appreciated at their true value—were neither military, political, nor diplomatic, but administrative; and administration, especially Indian administration, does not lend itself to picturesque description. That, perhaps, is one reason why the historians and essayists have had little to say about this side of Hastings' activity while they have lingered long over the more pictorial and dramatic episodes of his career, particularly the quarrel with his Council and the Impeachment. Preoccupied with these transactions they do him less than justice as the founder of the system under which British India is ruled to this day. Nor do their readers in general know how important that work was. The controversies which gathered round the great Governor-General in his life-time were so noisy and bitter that their echo still fills the air; and even biographers so balanced as Sir Alfred Lyall and Sir George Forrest find it difficult to turn their eyes away from them. Mr. Monckton Jones' book is valuable because it enables the student of Indian history to gain an insight into the details of Hastings' reforming and legislative activities in Bengal, before the administration of that province was thrown into confusion by the unscrupulous campaign of Philip Francis and his camarilla.

Macaulay deals with Hastings less generously than with Clive, and less fairly. He could not but admire this great ruler and statesman, or be insensible to the extraordinary merit of his achievements, and the force and energy of character they revealed; he pays just tribute to Hastings' tenacity of purpose, his serene composure, his fertility of resource, his firmness, his patience, and his sympathy with letters and learning. But his praise is qualified by reservations. Macaulay never forgot that he was a Whig of the advanced and progressive faction. This consciousness coloured much of his historical writing, and rendered it difficult for him to do full justice to those whom the Whig tradition had condemned, or with whom Whig leaders

had at some time quarrelled; it obviously affected his attitude towards Hastings.

Here was a man who had been in angry conflict for years with the most famous champions of Parliamentary Whiggism, those champions whose watchwords still resounded through the ranks in which Macaulay fought, whose badges and uniform he supposed himself to wear. Party loyalty made it difficult to hold the scales even; for if Hastings were an innocent and an injured man then clearly there could be no excuse or justification for the virulent persecution he endured at the hands of a group of politicians who were all Whigs, and were inspired and animated by the idol of the Whig *intelligentsia*, the great Mr. Burke himself. One must not grow too enthusiastic over Hastings, for that would be a kind of treason against the eminent persons who had overwhelmed Hastings with obloquy, accused him of the most abominable crimes, and tried their hardest to ruin him. Macaulay's party loyalty disposed him to believe that charges brought forward by such respectable authorities must have some warrant; and he was more anxious to place in a picturesque setting the transactions on which the Impeachment was based than to show how grossly they had been misrepresented by Burke and his colleagues. He was content with the evidence which satisfied them, and a fascinating narrative it was that he wove out of it all. If he had looked critically at his pile of fragmentary material, and considered its origin more carefully, he would have had a different story to tell, and one less creditable to his friends. He would have been bound to admit that they spent years in persecuting a man who had deserved all the gratitude and honour his countrymen could bestow on him, that they had compiled a monstrous list of charges against him, some of which were wild exaggerations, while others were sheer libels or downright lies; and that the whole indictment had been framed from statements made by Hastings' malignant enemies, who hated him because he had thwarted their base ambitions, and checked their remorseless greed.

The ground has been resurveyed and explored since Macaulay wrote, and Hastings has been acquitted a second time. His actions and his character are revealed in their true aspect by the publication of Sir George Forrest's volume of State Papers, 1772-1785, of Elijah Impey's Life of his father, of Sir James Stephen's 'Story of Nuncomar,' of Sir John Strachey's

'Rohilla War,' of Sydney Grier's 'Letters of Warren Hastings 'to his Wife,' and by the works of Lyall and Trotter. To all these the documents collected by Mr. Monckton Jones are a useful supplement or introduction. The more flagrant crimes attributed to Hastings are now known to have been invented. Some errors he did undoubtedly commit, in the dire extremity in which he was placed by the opposition of his Council, and the persistent demands of the directors of the East India Company; some things he did which had been better left undone. In a situation of desperate embarrassment, surrounded by treachery, intrigue, and disloyalty, he sometimes resorted to devices which were not always clever or successful; for he had no turn for chicanery, and preferred direct methods. He was intolerant of opposition, impatient of criticism, too haughtily convinced of his own superiority of judgment; and with all his suavity of manner, and serenity of temper, as domineering and self-confident as Clive himself. That is the worst that can be said of him; and it is little to set against his foresight, his personal integrity, his sagacity, his large statesmanship, and his deep and earnest sympathy with that vast native population whose destinies were in the hands of Englishmen.

The heaviest offences alleged against him by his Whig persecutors and the Whig essayist were the execution of Nuncomar and the Rohilla War. As to the former, nothing has ever been proved against Hastings, and any direct participation by him in the trial and punishment of the Brahman intriguer has been completely disproved. Hastings disliked, and had good cause to dislike, Nuncomar. But he did not arrange with the Chief Justice to get the man put to death. Nuncomar was indicted for forgery at the instance of a private individual, a native whom he had defrauded. Pershad Mohun may have known that the condemnation of Nuncomar at this juncture would be extremely convenient to the Governor-General; but there is no evidence that the prosecution was instigated by Hastings, in spite of Macaulay's assertion that no one but an idiot or a biographer could have any doubt on the subject. Nuncomar was fairly tried in open court, before the Chief Justice and other judges, found guilty by a jury, sentenced to death, and executed. The punishment may have been atrociously disproportionate to the crime; but it was inflicted in accordance with what was then the law of England, and it was certainly no worse to hang a man for forgery in Calcutta

than to send a starving woman to the gallows for stealing an ell of cloth in Cheapside. Macaulay says that the Chief Justice should have taken steps to get the capital sentence remitted. It was not his function to do so. The theory that Hastings and the judges conspired together to destroy Nuncomar was, in fact, invented by the criminal himself. After his condemnation a letter from him to that effect was read in the Council, and Francis said that it was false and libellous and ought to be burned by the common hangman. Such was the opinion even of the Governor-General's bitterest opponent at the time; though, after his return to England, Francis had the baseness to charge Hastings and Impey with committing a judicial murder, and the meanness to pretend that he and his colleagues on the Council were so terrorised by the Governor-General and the judges that they dared not treat Nuncomar's appeal for mercy with indulgence. How much credit can be attached to the statements of men, who, by their own admission, had behaved with cowardice and dissimulation? Yet it was these men who concocted the brief from which Burke and his associates spoke in Westminster Hall!

It was on the Rohilla War that the Whig managers expended their noisiest thunders, and the Whig historian his most glittering sentences. There is no passage in the essay on Warren Hastings which has barbed itself more firmly in the popular memory than the account of this transaction. Hastings is supposed to have hired out the swords of British officers, and the muskets of their soldiers, to a greedy Mussulman princelet so as to enable him to seize the territory, and suppress the liberties, of a free and prosperous nation; and to have connived at, if he did not incite, ravage, massacre, and wholesale depopulation by his barbarous allies: doing all this with no other motive beyond that of filling the Company's treasury and the pockets of its officials. An alluring picture is drawn of the brave and cultured people so wickedly oppressed.

> 'While anarchy raged from Lahore to Cape Comorin their little territory enjoyed the blessings of repose under the guardianship of valour. Agriculture and commerce flourished among them; nor were they negligent of rhetoric and poetry. Many persons now living have heard men talk with regret of the golden days when the Afghan princes ruled in the vales of Rohilcund.'

We learn how Sujah Dowla, the Wázir of Oude, had set his heart on adding this rich district to his own principality. 'Right

'or show of right he had absolutely none.' To gain from him the blood money of forty lakhs 'England now descended far 'below the level even of those petty German princes who sold 'us troops to fight the Americans.' Under the terms of the nefarious contract :—

'The horrors of Indian War were let loose on the fair valleys and cities of Rohilcund. More than a hundred thousand people fled from their homes to pestilential jungles, preferring famine, and fever, and the haunts of the tiger, to the tyranny of him to whom an English and a Christian Government had, for shameful lucre, sold their substance and their blood, and the honour of their wives and daughters. . . . The war ceased. The finest population in India was subjected to a greedy, cowardly, cruel tyranny. Commerce and agriculture languished. The rich provinces which had tempted the cupidity of Sujah Dowla became the most miserable part even of his miserable dominions.'

It is a brilliantly told little story, mostly fictitious. The Rohillas were not a nation or a people; they were the descendants of a body of Afghan adventurers, who had descended into Rohilcund, and made themselves masters of the country by force at a quite recent date. The population of Rohilcund belonged to a race almost as alien from these tribesmen as the English themselves. The fields were tilled by Hindu cultivators, the commerce carried on by Hindu merchants and traders. The Rohilla chiefs lived on tolls and taxes levied from the subject inhabitants like the Wázir of Oude or any other Moslem potentate. The British alliance with Sujah Dowla was not actuated by the merely sordid motives ascribed to Hastings. The Company and its agents were anxious not to extend their influence beyond the boundaries of Bengal, lest they should be drawn into the general welter of Indian politics and warfare. For this purpose it was desirable to support Oude as a buffer State against the incursions of the Mahrattas. Rohilcund had been attacked and overrun by these marauders, and was too weak to defend itself. Its chiefs had applied for, and obtained, the assistance of a force from Oude, stiffened by a British contingent, before which the Mahrattas had retired. In return for this service the Rohillas had agreed to pay the Wázir forty lakhs of rupees. The money was not paid, and the Rohillas were discovered to be intriguing with the Mahrattas against their southern neighbour. The Wázir determined to render himself secure by annexing their territory, and applied to the Calcutta government for the military aid he was entitled to demand under the treaty.

Hastings and his Council complied with the request somewhat reluctantly. They had no wish to be involved in a campaign, though they knew that the annexation of Rohilcund would be all to the advantage of Bengal, since it would convert Oude into the strong barrier State that was needed. When the Wázir pressed his claim they consented to send a brigade to co-operate with him, on the not unreasonable condition that the forty lakhs, due from the Rohillas, should be handed over to the Company.

Thanks to the disciplined British force, the operations were speedily successful. The Rohilla army was overthrown, and the country was annexed to the Wázirate. Sujah Dowla's troops behaved after the then customary fashion of Indian native levies. They left most of the fighting to their allies, and plundered and rioted freely, much to the disgust of Colonel Champion, the commander of the British force. But the special horrors on which Macaulay dilates do not seem to have occurred. The million Hindu inhabitants of Rohilcund were no worse off under their new than their old masters, though, as it happened, the last Rohilla chief, Rehmat Khan, was an abler administrator than the Wázir of Oude. The change of government did not disturb the cultivation of the land nor the trade of the towns; the people did not flee to the haunts of the tiger; nor was the honour of their wives and daughters in jeopardy. There was no general massacre nor wholesale depopulation. The Afghan Mamelukes, to the number of 20,000, were sent out of the country; but the lives of the Rohilla chiefs were spared, and they were allowed to live with their families in Oude. The East India Company had been relieved of a serious military liability; and the enlarged principality of Oude justified its existence as the secure Northern glacis of Bengal, until the power of the Mahratta Confederacy had been crushed, and the kettledrums of the horsemen from the West were heard no more upon the plains of Hindustan.

'A finer morality' may condemn the British participation in Sujah Dowla's quarrel, advantageous as the results proved to be. If so a finer morality must disapprove of the entire policy of taking sides with one 'Country Power' in India against another. It was that policy which brought our Asiatic empire into being; without it the Empire would have gone to France. Judged by the standards of the time the Rohilla War was not 'a sad and disgraceful story,' so far as Hastings was concerned; nor do the circumstances justify the tremendous diatribes for which it was made the excuse in the Impeachment.

Of that celebrated process it is difficult to speak with patience. Macaulay brings out all the spectacular and historic interest of the opening scenes. But whatever may have been the external dignity and splendour of the great State trial it was in essence mean and spiteful. The prosecution was conducted with rancour, violence, and mendacity, and without the smallest regard for judicial fairness or forensic restraint. The indictment, as Hastings rightly contended, was not a document which could be properly submitted to a court of law or dealt with under the forms of legal procedure. It was a farrago of allegations and accusations, mostly unsupported by specific evidence, and hatched up out of all the lies and libels which had been spread or invented by the enemies of Hastings, the men whose illicit gains he had docked, and whose malpractices he had tried to check.

The most active collector and purveyor of this venomous gossip was Philip Francis, who coached the Whig orators with the matter for the addresses which they declaimed before the suffering peers. Francis, whether or not he wrote the 'Junius' letters (and I do not see that it was much to his credit if he did), was a particularly bad specimen of the eighteenth-century placeman and political adventurer, greedy, self-seeking, utterly unscrupulous. He went out to India with two objects: to make money and to obtain the Governor-Generalship. For the latter purpose it was necessary that Hastings should be removed or compelled to resign; and to that end Francis devoted himself during his tenure of office at Fort William, going all lengths to thwart, worry, and discredit the Governor. Hastings proved too strong for him, and he came home baffled and vindictive. He was a man with a large capacity for hatred, a keen taste for revenge, and much skill in the compounding of invective and calumny. It is pleasant to remember that his machinations ultimately failed in England as they had failed in India. Years after the trial was over, when Hastings was living tranquil, happy, and respected in his Shropshire home, Francis was still peevishly lobbying and intriguing for that Governorship which eluded him to the last.

It was not creditable to Burke and his friends that they accepted this implacable libeller as the source of their inspiration, together with various other Indian enemies of Hastings. One of these was William Burke, who had financial as well as political ambitions in India, which Hastings had not thought

proper to promote. Edmund Burke indignantly repudiated the suggestion that he had any pecuniary interest in the projects of his kinsman; but even so, information from this quarter should have been received with caution. The 'managers,' however, were in no mood to weigh evidence, preferring to rouse passion and prejudice by torrents of vituperative rhetoric. These speeches have been held up to our admiration, and we have been told that they touched the high-water mark of English eloquence. Possibly they appealed to the taste of a generation debauched by orgies of inflated verbiage in both houses of Parliament. They do not seem to have impressed the tribunal to which they were directed, even though ladies in the audience became hysterical when Sheridan dilated on the (mostly imaginary) sufferings of the Begums of Oude, and fainted when Burke described the diabolical tortures inflicted on the Bengal peasants by one of the Governor-General's native officials, whose name the great orator pronounced with grotesque incorrectness.*

Edmund Burke, at the beginning of the trial, had passed his best days. Even so warm an admirer as Macaulay admits that his temper, always irritable, 'had now been made almost savage 'by bodily and mental vexations.' He was suffering under the effects of ill-health, advancing years, poverty, personal disappointment, and political defeat. He and his friends were smarting at their failure over Fox's India Bill, and they entered upon the proscription of Hastings hoping to draw from it convenient weapons to assail and weaken Pitt. Gradually it would seem that Burke worked himself up into a sort of frenzy over the alleged iniquities of the Governor-General, and allowed himself, in Macaulays words, to be 'hurried beyond the bounds 'of justice and good sense.' He went a very long way past the bounds, and sometimes fell into paroxysms of almost incoherent fury. He raved and railed and objurgated, with his budget of fiction and exaggeration, ably supported by the impeccable Mr. Fox and the austere Mr. Sheridan. Burke chose to call Hastings' protest against the indictment 'an indecent and unbecoming paper'; but it will strike modern readers as much more dignified and just than the volleys of abusive rhetoric and turgid metaphor with which he was assailed.

* The man's name was Govind Singh. Burke called him Congo Sing, which no doubt sounded more villainous.

'In truth the articles are not charges but histories and comments. They are yet more; they are made up of mutilated quotations, of facts which have no mutual relation but are forced by false arrangement into connection, of principles of pernicious policy and false morality; assertions of guilt without proof or the attempt to prove them; interpretations of secret motives and designs which have passed within my own breast, and which none but myself would know.'

There is nothing indecent or unbecoming in this very justifiable protest; nor in the simple and pathetic sentences in which Hastings refers to himself as 'a man who was separated, while 'yet but a schoolboy, from his native country, and from every 'advantage of that instruction which might have better qualified 'him for the high offices and arduous situations which it became 'his lot to fill.'

We are asked to believe that Burke had a genuine sympathy with the people of India, and that it was this generous enthusiasm which prompted him to accuse Hastings of having, through his native tools and subordinates, 'wasted the country, destroyed the 'landed interest, cruelly harassed the peasants, seized their crops, 'tortured and degraded their persons, and destroyed the honour 'of the whole female race of that country.' Burke's 'sensibility,' it seems, had been moved beyond limits by all he had heard about Indian extortion and maladministration; but even sensibility should take some account of facts and should abstain from confusing the criminal with the judge.

It is, of course, true, that in the years following Plassey there was bad misgovernment in Bengal, and ruthless plundering by the Company's servants and their native agents. The fault lay partly with the Company itself, since it paid its officials a wretched salary, on which they could not possibly live, and encouraged, or at least allowed, them to engage in private trade for their own profit. When the victories of Clive had placed the native governments and their subjects at the mercy of the English there was nothing to limit the abuses of this system. The trading licence became an engine of oppression, by which the merchants and dealers were squeezed, and the unfortunate farmers forced to sell their produce at the price fixed by the *banyans* employed by the factors and district supervisors. The company's 'nabobs' were, as Clive asserted in the passage quoted above, not specially inhuman; but they were young Englishmen, without much training, experience, or sense of responsibility, who found themselves invested with almost uncontrolled power over a large and helpless population, and they

were in a hurry to get rich quickly in order to go home to spend their fortune in a better climate than that of the Ganges valley. It was the worst chapter in our relations with the peoples of India, and the worst has been made of it. It is commonly forgotten that if this period of misgovernment, or rather of non-government, was bad, it was also short. The flaring light directed upon it, during the years of that preposterous Impeachment, has affected the vision of many spectators ever since. The belief, still quite common in foreign countries, that the people of India have been systematically and ruthlessly exploited by their English rulers is largely due to the rhetorical perversions of Burke and Fox, re-echoed by Mill and other writers. The evils were gross and palpable; but they were such as are almost inevitable when any body of Europeans find themselves invested with unchecked power over Eastern or Southern populations; and they were soon amended.

The remedy was to give the real masters of the country responsibility for its administration. Clive saw this; but he was anxious not to extend the Company's liabilities, and contented himself with unsatisfactory half-measures. In 1765 he brought to a close the disorganisation of the previous eight years by establishing the 'Dual System' in Bengal. The civil government and criminal jurisdiction were still to be carried on in the name of the Emperor and the Nawab; the Company had the Dewani or right of collecting revenue, but Clive did not understand all that this involved. The double jurisdiction did not abolish all the former abuses, and aggravated some of them; the Company's agent had no official right to govern, though every English factor and resident still found himself a kind of sovereign in his own district, courted and flattered by traders and zemindars, and under no kind of control from the magistrates, police officials, and local courts technically responsible for the peace and good order of the country.

Hastings, with his three-and-twenty years of Eastern experience, knew much more about Indian life and social conditions than Clive ever learnt, and had far more closely studied the details of trade, industry, land tenure, and administration. He saw that the dual system was little better than the old confusion, if it was not worse; and that the actual government of the country in all its branches, including revenue, justice, police, and land tenure, must not only be formally assumed by the English but should be carried on under

their direct control and constant supervision, and by laws and regulations which they made and could enforce. In the first two unfettered years of his rule the civil administration of Bengal was reorganised on the model which he had conceived, planned, and shaped; and it is that model round which the whole English system of government in India has been built. Mr. Monckton Jones does not go beyond the mark when he says that 1757, the year of Plassey, is not more important as a turning point in Indian history than 1772, the year of Hastings' three great measures,—the Land Settlement, the Plan of Justice, and the Reform of the Customs. Taken together 'they form,' says Mr. Jones, 'the Magna Carta of the native subjects' in the British dominions of the East: just as the standards of conduct which Hastings imposed upon the Company's servants have become the tradition of generations of Anglo-Indian officials. He sacrificed his comfort, and risked his own safety and prospects, in doing these things;* but he had performed services to Great Britain and to India alike which can scarcely be over-estimated. Our debt to Hastings is no less than that we owe to Clive, though it is more rarely, and more grudgingly, acknowledged. Without the great statesman we might have lost our Empire in Asia as swiftly as the great soldier had won it for us, or we might have kept it oppressed, misruled, and chafing in an unwilling captivity. Hastings was the first to see that India cannot be safely governed without the active aid and concurrence of the natives of the country, without constant reference to the customs, sentiments, and beliefs inherited from the past, and without a sleepless regard for the interests of the vast, inarticulate masses of the population. Those principles have animated the best of our Anglo-Indian administrators since his time, and no scheme of reform that ignores them can be permanent or valid.

SIDNEY LOW.

* In 1781 Hastings wrote: 'What a world of enemies have I 'submitted to the hazard of creating by disregard of personal con-'sequences. In this establishment I have deprived the bulk of both 'civil and military servants of their settled means of acquiring rapid 'fortunes. . . . The acts of this Government are constituted on principles 'diametrically opposed to popularity and established opinions.' 'Is it 'necessary,' asks Mr. Monckton Jones, 'to look further than these 'retrenchments, and the lowered receipts from investments and revenues, 'to account for the subsequent persecution of this great administrator?'

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